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## MONTHLY MAGAZINE.

JUNE, 1880.

THERE IS FASHION in flowers, as in all other things. The wild Daisies of our fields are now favorites of fashion, and, when in season, the ladies search for them in the fields about as eagerly as they seek the beautiful Trailing Arbutus in the early spring, while no flower more frequently decorates the hat and dress. We are glad the lovers of flowers are looking once more to the beautiful flowers of the fields, and hope next autumn our elegant native Asters will not be forgotten. A few years since almost any single flower was discarded, even though the double varieties were far less beautiful. All tubular flowers, like the Campanulas and Daturas, are really deformities when they become double; and cup-shaped flowers, depending for their beauty upon broad masses of color, or delicate markings, are seldom improved. We do not hope to see the Pansy or the Gladiolus double, for in this form they would lose much of their beauty. The beautiful little Cineraria is now to be obtained in a double form, but it is a good flower spoiled, having lost its chaste markings and delicate coloring. A change, however, has taken place in public sentiment, and soon we may rush heedlessly to the other extreme. The cry is now for single Hollyhocks and Poppies, Pæonies, and even Dahlias, and we know not how long ere the florists will find a demand for single Asters and Stocks and Roses.

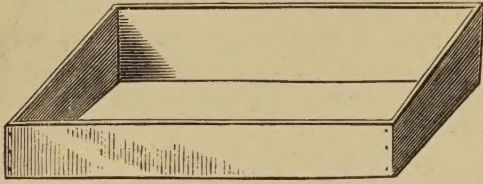
Many can remember when our flower gar-

dens were a labyrinth of narrow walks, with little triangular, diamond, and heart-shaped beds, bordered with Box, or boards, or stones, that required a world of labor to keep them trim and tidy. Now, thanks to the improved taste, or the freaks of fashion, if the stupid and fickle goddess whom so many worship is responsible for the change, our ornamental grounds are carpeted with living velvet, with here and there a bright and graceful bed, just enough to break the uniformity and make a beautiful, but not over crowded pattern. Among the many ornaments for the lawn, nothing can be more appropriate and elegant than a vase filled with plants. It takes long years to obtain trees on a lawn; but a few beds of flowers, and vases, can be arranged and put in shape in a few days. In the April number we gave a colored plate of a bed of large foliage plants, and, in the MAGAZINE for May, representations of a few of the best varieties of Coleus, so useful in making beds of ornamental-foliage plants. We thought it well to complete the series by presenting our readers with a vase, the drawing being taken from one on our grounds. We do not present it as a model, for we have seen much better, but it shows what can be done with a few simple flowers, which our readers, we think, will recognize. On the left are Tropæolum and German Ivy, Petunia and Scarlet Geranium; on the right, Maurandya and Coleus; above these, Caladium and Dracæna,



## TO MAKE SEEDS GROW.

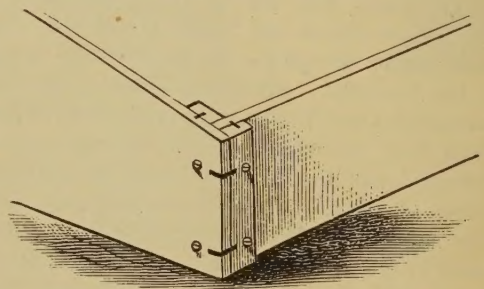
To make fine seeds germinate in our early springs is somewhat difficult, without some kind of artificial aid. The springs in many parts of the country are subject to sudden changes, warm spring showers are followed by cold, drying winds, and days of cold rain storms, and, perhaps, frosty nights, enough, sometimes, to destroy tender seeds and try the patience of the



planter. If the soil in which seeds are planted is a stiff clay, it is often too cold at planting time to effect their germination, for it must be understood that warmth and moisture are necessary to the germination of seeds. Neither of these will do alone. Seeds may be kept in a warm, dry room, in dry sand or earth, and they will not grow. They may be placed in damp earth and kept in a low temperature, and they will most likely rot, though some seeds will remain dormant a long time under these circumstances. But place them in moist earth, in a warm room, and they will commence to grow at once. Another difficulty with a heavy soil is that it becomes hard on the surface, and this prevents the young plants from coming up, or if, during showery weather, they happen to get above the surface, they become locked in, and make but little advancement, unless the cultivator is careful to keep the crust well broken, and in doing this the young plants are often destroyed. If stiff, the soil where the fine seeds are sown should be made mellow, particularly on the surface, by the addition of sand and light mold. If seeds are planted too deep, they either rot in the damp, cold earth, for want of warmth necessary to their germination, or, after germination, perish before the tender shoots can reach the sun and air. If seeds are sown in rough, lumpy ground, a portion will be buried under the clods, and will never grow; and many that start, not finding a fit soil for their tender roots, will perish. A few may escape these difficulties and flourish. But we will suppose the soil to be well prepared, fine as it can be made, and of that loamy or sandy character best fitted for small seeds, and that the seeds were sown on the surface, with a little earth sifted over them, and that this was not done until the season was so far advanced as to furnish the warmth necessary to secure vegeta-

tion. Under these very favorable circumstances many seeds will grow, and, if the weather is both warm and showery, very few will fail. But if, as is very common at the season of the year when we usually sow our seeds, we have a succession of cold rain storms, many of the more tender kinds will perish. A night's frost will ruin many more. If, however, the weather should prove warm and without showers, the surface will become very dry, and the seeds, having so slight a covering, will be dried up and perish as soon as they germinate, and before the roots attain sufficient size and strength to go down in search of moisture. Of course, the finer and more delicate seeds, and those natural to a more favorable climate, suffer more than those that are more robust.

To overcome these natural difficulties, the hot-bed is the most effectual, as the fermentation of the manure produces a steady heat, while the frame and the glass protects from cold winds and preserves a mild atmosphere, something like what we have in our green-houses. This is secured, in a measure, in what is called the cold-frame, a simple large box, or frame, covered with sash, placed over a well-prepared bed of earth. No bottom heat is supplied by this arrangement, but the protection from the wind is a great assistance, and in ordinary weather the cold-frame is quite warm enough for most things. Simpler than even this is the plan we would recommend, and one within the reach of all. It is simply a frame made of four boards nailed-together, to be cov-



ered with cloth or boards, or anything of the kind, in cold and stormy weather, and during heavy rains and, generally, in the night. Indeed, unless the weather is very favorable, it is well to keep the covering on until the young plants appear. Of course, seeds cannot be sown in this as early in the season as in the hot-bed—not much before the ordinary time of outdoor planting.

We have given an engraving showing the way the box is made, though hardly necessary.



A gentleman who has used this for growing young plants, for several years, secures the ends with wires, so that it can be taken apart without injury, and stored away for future use. The plan, as shown in the engraving, is to put four screws into the boards with their heads projecting; make a saw cut in the board between two of the screws, as shown by the black mark in the engraving. A wire is fastened to each screw-head, passing through the cut, which keeps the side boards in place. The screws should be long, and pass into cleats on the ends of the boards, which will add to their strength and durability.

In no pursuit is patience more necessary than in that of gardening, and a little faith and charity will often prevent ill-feeling, and add much to the happiness of the cultivator. Though care and knowledge are essential to success, these do not always secure the desired results. Unfavorable seasons and untimely frosts often blast the fondest hopes, while hosts of insects, new and old, feast upon the labors of the discouraged gardener. With what seems the best of care seeds sometimes do not come up, and then the seedsman's ears are kept in a constant state of irritation, for he is usually blamed for the trouble, right or wrong. When seeds grow they do not always produce just what was expected or promised, and this is another cause of vexation, unless the matter is treated philosophically, and then it is one of interest and profit.

Nurserymen, seedsmen, and florists also have their troubles, and the very best of opportunities for the exercise of patience, and some of them are caused by the impatience and unreasonableness of their customers. Purchasers should understand that in the removal of trees and plants, especially long distances, there is, and always must be, some danger of loss, and this should be borne patiently by some one, without any charges of carelessness or dishonesty, unless these are unmistakable. People often seek things out of season, or with undue haste. If the nurseryman or florist has in hand several thousand orders at the opening of spring, it is evident all cannot be supplied on the first warm day. If you get a little impatient and write for your trees to be sent along in haste, and a postal card is received from the nurseryman, saying that he will ship your trees by a certain day, and then happens a week of frosty days and nights, so that he cannot dig a tree, don't indulge in the thought that your nurseryman is untruthful, and perhaps dishonest, because it will make you uncomfortable; and,

above all, don't write and tell him your thoughts, because it may make him unhappy, and also give him a poor opinion of yourself.

"Why did you not send my *Verbena* and *Coleus* plants? It has been very warm here for a week; longer than it would take for the plants to reach me." Such letters are often received by florists while the thermometer shows several degrees of frost, and if the plants had been forwarded as desired they would have been ruined. Practical men have learned not to put trust in a few early, warm spring days. Perhaps the same mail brings a postal saying, "The things you sent me were frozen on the way and ruined. Of course, we expect another lot as soon as safe to send. We were in haste for the plants, but you should not have forwarded them until you knew they would come safely."

There is little risk in shipping seeds, for, if packed dry and with ordinary care, they may be sent any distance with perfect safety. For long sea voyages they are usually secured in tin cans, while bulky seeds are put in wooden cases lined with tin. In this manner seedsmen ship their goods to India, China, Japan, and the Islands of the Pacific, and strange things, too; for these far countries very often order Dandelion and Quack Grass seed, roots, etc., that are with us pestilent weeds. There is nothing produced by nature but is useful somewhere. None, however, are exempt from trouble and vexation, and the seedsman has a fair share. Nurserymen grow their plants and trees from buds, cuttings, or grafts, so that, with proper care in labelling, &c., every tree or plant will produce its kind. The seedsman may grow seed from the choicest vegetables or flowers, and though, as a general rule, the better the strain—the choicer the flower or root which produces the seed,—the better the product, there is no absolute certainty as to the result. There is a disposition in almost all flowers to go back to the original type, the old wild kind, and it is only by "eternal vigilance" that the quality can be kept to the highest standard.

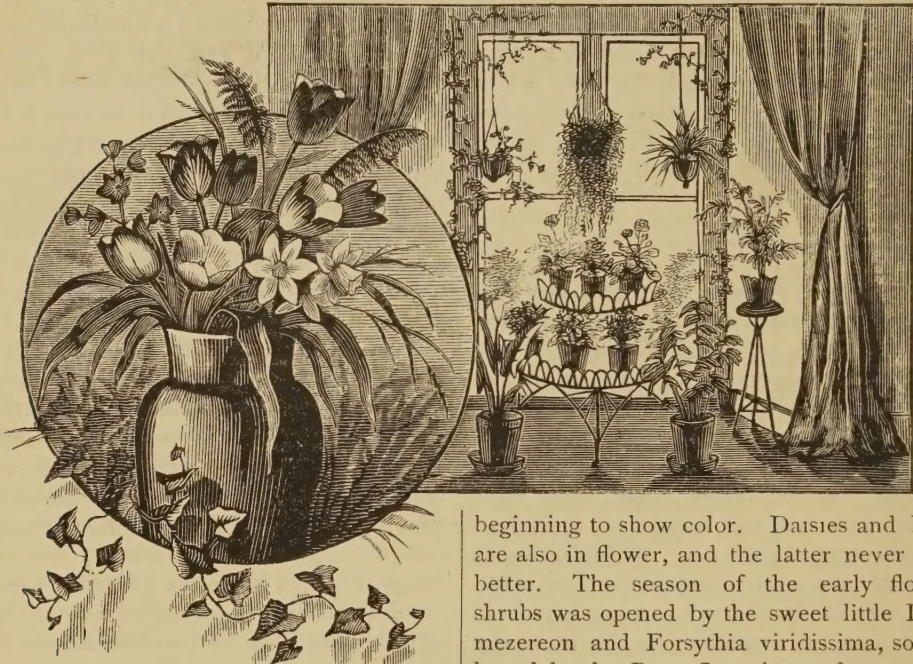
In the production of a high-bred plant, either flower or vegetable, much of its vitality is sacrificed, so that it produces very little seed, and these of low vitality. Their production is therefore costly, and care is required in their planting and treatment or they will not vegetate. The conscientious seedsman, who takes pains to grow the very choicest seeds, that cost him ten dollars an ounce when he could have grown the common of the same name for a dollar, is often met with the compliment that his seeds are very expensive, and that they "did not come up, while some of my own growing at the same time and place grew like weeds."



## WINTER AND SPRING.

Every season has its peculiar pleasures, if we only have the good sense to secure and enjoy them. In winter, when the ground is covered with snow, while fleecy clouds are hurled

In this latitude, now the middle of May, the Hyacinths are in perfection, as are also the early Tulips, the double varieties just coming into flower, while the buds of the late sorts are



against the windows, how delightful it is to feel that we are sheltered from the storms without, while our windows are adorned with a little of tropical luxuriance and beauty. It was on one of these occasions and with something of this feeling that, one evening, we designed our pleasant chromo, Winter In-doors and Out, showing the flowers that could be grown in the house in winter, while, through the window, is seen the snow-covered hills and valleys, the leafless trees, and the swiftly gliding sleighs.

From many of our readers we have received photographs of very creditable parlor or window gardens, most of which we have published in our various works. We are now indebted to a lady of the northwest, ALMIRA W. ANTHONY, of Kansas, Minnesota, for a view of her window garden, an engraving of which we present to our readers. Surely, if our friends in Minnesota, with their severe winters, can do thus admirably, none need fail. In this connection we also give an engraving of a spring bouquet, from a lady of Ohio. We fulfil the scriptural injunction, at least thus far, for we rejoice with those who rejoice, and number among our best friends those who love and successfully cultivate the flowers which a kind Father has given to cheer and beautify our path through life.

beginning to show color. Daisies and Pansies are also in flower, and the latter never looked better. The season of the early flowering shrubs was opened by the sweet little *Daphne mezereum* and *Forsythia viridissima*, soon followed by the *Pyrus Japonica* and some of the *Spiræas*. The Lilacs are beginning to show a little color. It is yet early to trust bedding plants to the open ground, and those who, in their anxiety for summer, trusted tender plants to the tender mercies of fickle May, look anxiously at the sky and clouds and thermometer on cold evenings. By the time this number reaches our readers there will be no danger anywhere, and nothing is gained by putting out tender plants very early. A cold night or two will give plants a check from which they recover



slowly. Such caution will seem strange to our southern friends, just as strange as it seems to receive from them July flowers in May.





### OTHER PEOPLE'S GARDENS.

"I have been in Corisande's garden and she has given me a Rose."

I have been in Sylvia's garden and she has given me a bouquet, and here among the bright blooms is a Rose, as rich and rare as any that grew in Corisande's garden. Corisande's garden! with its "huge bunches of Honeysuckle and bowers of Sweet Pea, and Sweet Briar and Jasmine clustering over the walls, and Gilliflowers scenting with their sweet breath the bricks from which they seemed to spring. There were banks of Violets which the southern breeze always stirred, and Mignonette filled every vacant nook."

There are no white peacocks in Sylvia's garden, nor glassy hives of "golden-banded bees," but there is a tricky sprite who follows at our heels and pokes his inquisitive little nose into the flower-cups, like a human bee hunting honey; and one of these days that wee bit nose will come in contact with a real bee, and then—Well, well, Robbie must learn betimes that bees have stings—that there is no Rose without a thorn—must learn what we all learn sooner or later, that there is no unalloyed bliss to be found any more on earth since the first garden was left without a tiller. But his childhood's garden is nearer Paradise than any other bit of God's green earth that Robbie's restless feet will ever press.

Ah, our lost Eden! that we never cease to bemoan. It was a garden and was never destroyed, but scattered, like Adam's race, over all the broad earth, and you may catch glimpses of it here and there, wherever you may roam. That first garden is not so minutely described as one could wish, but, like Bacon's garden, it must have been of goodly dimensions from the number of trees it contained: "every tree that is pleasant to the sight and good for food; the tree of life also in the midst of the garden, and the tree of knowledge of good and evil."

I enjoy watching the progress of the various gardens of the neighborhood, from the earliest springtime until fall comes and lays them low.

And I fancy that a year's observation of a garden would give one a very good index to its owner's character. A garden not too precisely ordered and with a profusion of bouquet-flowers argues, methinks, a generous mind; while if flowers that be best for show and not fit to be culled dominate, the owner is of an ostentatious and selfish spirit. Other traits crop out, such as neatness, order, and the reverse of these. I remember stopping one day to admire some plants in a garden that I was passing, and, beyond the flowers was a perfect wilderness of weeds; their background destroyed the charm of the picture for me, and I have not had so good an opinion of their owner since.

Another little flower-plot that I sometimes pass in my rambles always holds my eyes for many minutes; it is simple as a Daisy, and as neat, not a ragged edge of border mars the perfect effect, and it is a true exponent of its owner's character, as I happen to know; her house and daily life are just as carefully ordered. In some very handsome grounds, among costly bedding-plants, rare Roses and shrubs, is a large plat of sweet, old-fashioned Pinks; and I said to myself, "there must be a sweet spot somewhere in the nature of the man who cherishes these dear old flowers." In another garden that I wot of, there are groves of Gladioli, dozens of Dahlias, pyramids of Hydrangeas, scores of new-fangled foliage plants, and more "novelties" than I know the names of—and not a sprig of Mignonette, not a bit of sweet stuff anywhere. And, as I looked about me with dazzled eyes, I longed for the face of a common flower—a bed of Heartsease, a single Daisy even would have been a pleasant sight among all that splendor.

But, to return to Sylvia's garden, here are sweet things in plenty, and not a few new and costly flowers as well. One bed of Tea Roses and Mignonette is especially charming, and a near colony of rose-colored and white Vinca is almost equally attractive. A bed of Sweet Alyssum suggests nosegays in abundance, and a mass of blue Lobelia reminds us of June



skies. A bed of broad-leaved Caladiums transports us to the tropics, and we see the reflection of Afric's sultry clime in the burning petals of the scarlet Geraniums. In the spring, Sylvia had a little bed of early-comers in a sunny spot, where the Crocus, Scilla, and Grape Hyacinth delighted the eye and the heart in the midst of the frosts of March. Later, two generous beds of Tulips blazed with gorgeous color in contrast with the tender green of new leaves and grass. There is about a quarter of a mile of Pæonies, not in the garden, but bordering a walk that leads to the orchard; indeed, the flowers seem to have broken bounds and stray about in all directions. I saw Pinks growing in the vegetable garden, and they seemed quite contented with their humble home. And I even found some Sweet Clover in a cosy corner, the identical Sweet Clover that used to grow in my grandmother's garden. That old garden, doubly guarded by its high paling fence and hedge of Cherry trees, Privet, Hop-vines, and Lilac bushes, a glorious tanglewild, a paradise of the bird folk. Like Corisande's garden, it had bee-hives, but, unlike that fairyland, it had tall red Hollyhocks, and Bachelor's Buttons, and Poppies, and Sage, and Thyme, and Gooseberries, and Currants, and Asparagus, and, yes, Onion beds, too! But it was far from being the jumble that one might imagine. Order reigned supreme in this old-fashioned demesne; not a weed was suffered anywhere, and children were as summarily dealt with. We children used to beg for the treat of a peep inside those sacred grounds. Alas! not a vestige of that homely garden remains to-day, not the stump of a tree even is left; and when, one day last summer, I came unexpectedly upon just such an old garden, at the back of an ancient farm-house, the tears filled my eyes; it was like finding a forgotten grave in the lonely fields.—E. A. M.

#### CYCLAMEN CULTURE.

Having read in the April number of the MAGAZINE a communication from "Constant Reader" in regard to the Cyclamen, I desire to give my experience in growing this peculiarly lovely plant. I have had a bulb for six years. I did not succeed in having it bloom freely for the first three years, on account of having it planted too deeply in the earth; it bore a few scattering flowers, not at all satisfactory. Two years ago last September I removed the earth, putting it in the same pot, seven-inch, in which it was first placed and still remains, leaving the crown above the earth. It has bloomed beautifully every season since. This winter it had as many as thirteen blossoms

at once. It commenced to bloom the middle of December and has had, up to the present time, fully seventy-five flowers, to the delight and admiration of my many friends. I wish all the readers of the MAGAZINE could have enjoyed with me the delicious fragrance of my Cyclamen. During the summer I place the pot under the edge of my flower stand, where the sun cannot reach it, giving it a little water, just enough to keep it moderately moist. In September I take the bulb out, and refill the pot with new earth, adding some pulverized charcoal. Through the winter, about once in two weeks, I give it a little liquid manure, and plenty of water all the time. I place the pot on a bracket, about half way up the window, near the glass, where it gets plenty of sun and warmth. If "Constant Reader" will follow this plan she will be amply rewarded.—MRS. J. C. G., *Beaver Falls, Pa.*

#### PRACTICAL PLANT NOTES.

I have derived so much pleasure as well as valuable information from the pages of the MAGAZINE, that I am induced to give my experience in mending a broken flower, which may be of service to others, should they meet with a similar accident to one of their pets. Late in the fall I took from the bed in the yard a bulb of *Amaryllis Johnsonii*, and potted it, placing it on a shelf in a large, sunny window in my sitting room. It grew vigorously, and soon sent up a strong flower-stalk, which grew rapidly. One morning, in putting down the sash, after it had been raised to admit fresh air, the point of the bud was caught by the sash and snapped from the stalk, merely hanging by the outer fibre. Acting, I suppose, on the principle that "a drowning man will catch at a straw," I took a piece of grafting cloth which was convenient, and, taking off a little strip an inch wide and three inches long, placed the bud in position on the stalk, and wrapped around the well-waxed cloth, thus uniting the bud and stem just as it was before the accident. Had I not been so near crying, I could have laughed at the attempt to mend a broken flower; but, to my astonishment, the bud continued to grow and expand as though it had never been severed, and in one week it had two magnificent flowers fully expanded, with two more opening. These continued to grow, and in two days more there were four as handsome flowers on the stalk as I ever saw, each one measuring nearly five inches across. It is needless to say that, hereafter, I shall always keep a roll of grafting cloth convenient, in case of accident.

I was delighted with "C. E. P.'s" article, in the February number, on the *Lophospermum*.



I can fully endorse all said in its praise. I have had this beautiful climber for years, growing on a trellis in my yard, and have kept it from year to year by taking cuttings in the late fall and keeping them in my pit till spring, when they are fine, strong plants to set out in the garden. This winter has been so mild that one of the old roots, left in the ground without protection of any kind, has put up vigorous shoots, which are growing finely, and I have no doubt, if covered in the fall after cutting off the tops, they would survive a pretty severe winter. Mine is *L. Hendersonii*.

I would like some information about my Ever-blooming Roses. Last summer I had some of the finest varieties in a bed where they were exposed to the full force of the sun. Being small, I suppose the heat was too great, and I lost about half in the bed. As a means of affording them partial shade, I have this spring planted Canna and Caladium roots among them. I have been advised to mix salt with the soil, but am afraid to try it lest I should kill them. The soil has a great deal of lime in it. Would an application of salt be of benefit, or otherwise?—MRS. E. R. D., *Alexandria, Ala.*

The method adopted to give the Roses a partial shade will undoubtedly prove a good one.

A light dressing of common salt can sometimes be employed to advantage, but caution must be used, as in too large quantities it is injurious to plants. Nothing is better for Roses than old stable or cow manure.

#### A FEW SMALL FLOWERS.

MR. EDITOR:—With your permission, I would like to call the attention of your readers to a few choice, small, annual flowers. Flowers large and small have their place, and are, perhaps, alike deserving, yet my favorites are the



GILIA.

little flowers, like the Mignonette and Sweet Alyssum. It is not, however, to these I ask notice, because they are already sufficiently ap-

preciated. The small flowers make such a charming bed and are so nice for cutting that everybody must like them, I think, when they know them.

The little Gilia is one of the best of these small flowers that will look better if grown in



LEPTOSIPHON PLANT.

little clumps, or in small beds. The flowers are in panicles of a dozen or more, and the plant seldom reaches a foot in height, generally not more than eight or ten inches. If the seed is sown pretty thick in the beds where the plants are to bloom, they will do well; or they may be sown in sheltered beds and transplanted, but if this is done they should be moved to the flowering beds when very young, for they flower when quite small. Once, when other things caused me to forget transplanting my Gilias for two or three days, I found them a mass of bloom in the seed-bed.



LEPTOSIPHON FLOWER.

Another nice little flower is the Leptosiphon. I don't know of any prettier little flower, for it bears such nice clusters of star-shaped flowers of the most delicate shades and tints imaginable. I must own, however, that I do not always succeed with it. I believe it does not like the bright sun. Perhaps, in its home, in California, it inhabits the cool canyons, and side-hills. I only know that I succeed best with it in a cool place, a little in the shade. It is a pretty pot-plant, but must not be allowed to get dry.

For borderings of beds the Lobelia has been properly used for a long time, and I don't know of anything better; but for hanging baskets it is best of all, that is, the loose-growing or drooping kinds. There are some compact-growing varieties that make excellent pot-plants



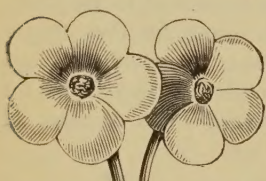
of a fine, globular form. I have one now, literally covered with flowers—almost a ball.



LOBELIA.

It is called compacta. There are two of this kind, blue and white. These I always start in a seed-bed, or cold-frame.

The Fenzlia is a little gem. What a mass of small flowers it bears, to be sure, and how pretty they are, rosy-tinted with delicate yellow throats. The plant will grow only about four or five inches in diameter, and the same in height. It is an excellent pot or basket plant,



FENZLIA.

but does not like the sun quite as well as the Leptosiphon, so I have to be careful in this respect. There is pleasure, however, in growing things that are somewhat difficult, and, as you have observed, we should endeavor to accomplish hard things and conquer success.

If these suggestions shall prove of value to any, I shall be pleased. I may mention a few more of my favorites at another time.  
—AMATEUR.

#### FROM THE ISLAND OF JERSEY.

MR. VICK:—Your publications I receive regularly. I have shown them to many of my acquaintances, as well as compared with like works of Covent Garden and Hay Market of London, and the general verdict has been, "Well, those Americans do get up things as well and better than we do." The colored lithographs, wood cuts, type and paper have been said to give great credit to your house as a monthly issue.

This little island revels in the Azalia and grafted Rhododendrons. The mania here is bedding with the Geranium of variegated foliage. Though in latitude 48°, our winters and summers are so mild as to enable us to culti-

vate the Fuchsia as an out-door shrub. The Lady's Ear-drop attains in our lawns twelve to thirteen feet in height. Owing to our unprecedented winter many of our out-door Oleanders have been injured. Two American Agaves bloomed here winter before last, but, strange to say, the Grape-vine cannot be successfully cultivated in the open air, owing to the mildew; but grown in our vineries, which are very numerous here, we get bunches weighing from six to eight pounds, every berry the size of a shrapnel shot, or an inch in diameter. These we obtain in January and February, for which we receive in the London market from \$5 to \$6 per pound. Peaches of an exotic growth bring, in January and May, fifty to sixty cents a piece, though generally, cultivated as a wall espalier, only bring seventy-five cents per dozen. The early Potatoes which are in general culture here have, for the past years, averaged from \$800 to \$1000 per acre, when reaching London markets in May and June. This island, being a fortnight earlier than the Mediterranean isles, commands the price of precocity in London. Cannot like results be obtained in your New York market from some of your southern States? Artificial culture will pay if the produce is made to appear early in the season.

The sale of our Jersey cows has been dull, owing to the Congressional act which was obtained by your American breeders, which prohibited the importation of the native breed, thereby giving to them the monopoly.—PH. DU HEAUME, *Island of Jersey.*

#### MELON CULTURE.

MR. VICK:—In the February number of the MAGAZINE you remarked that "man may be happy without a garden." Such a thing, perhaps, is possible, because those who have no gardens of their own can enjoy those of their neighbors, and that costs them nothing. Go out into the suburbs of any city during summer evenings, and what crowds of "old men and children, young men and maidens" you find enjoying the beauty and fragrance of the gardens.

Now, while admitting the above proposition, with the modification indicated, I wish to say that it is difficult, if not impossible, for most people, especially boys, to be either happy or honest without a melon patch. To be sure, they can look at the melon patches of their neighbors, but this is not satisfactory. The flowers gratify the eye and the nose, but the mouth refuses to be satisfied with anything short of a taste of the delicious melons. Then comes expense, and in the absence of money, I fear temptations which the boys are sometimes un-



able to resist, and this leaves a bad taste in the conscience if not in the mouth.

Few people have any proper idea of the great value of the melon crop to this country, and I must say that I had little knowledge of the matter until I spent some weeks in the "far west." On the fertile prairies of the west and southwest the melon is perfectly at home, grows with little care, and gives abundance of the richest possible fruit. I think I could make a fortune, in a hurry, if I could take a few loads of our western and southern melons into Covent Garden market every day. A gentleman once told me in London, I think it was Mr. ROBINSON, editor of *The Garden*, that the finest fruit he ever tasted was a Watermelon in Baltimore. I don't think I ever enjoyed a cool Watermelon, on a hot day, quite as much as once when taking dinner with the venerable and beloved horticulturist, CHARLES DOWNING, of Newburgh.

A farmer, with his family, moves to the west and takes up land. He can have no Apples, or Pears, or Currants, or even Strawberries for a



year or two, at least, but he can sow some Watermelon seed, and in three months after the seed is sown his table can be supplied with fruit that kings might covet, and many can not obtain. Thus, not only pleasure, but health, is secured almost at once, for cooling fruit is a necessity, especially in a new country subject to bilious diseases.

I merely started to tell your readers how to grow melons early and good, in places not quite favorable to their full development, and you see how I have wandered. The only way in which I can get a good crop of melons, and early, in Western New York, is to break up the sub-soil in a circle about three feet in diameter and eighteen inches in depth, then mix some well-rotted manure with the soil, say nearly a quarter of manure. This is what I call a melon hill. Into these I put a dozen seeds, and not very close together. Over each hill I put a little box, covered with one or two lights of glass. This protects from the weather and makes a miniature hot-bed, or rather, cold-frame, though it is far from being cold inside. The plants soon appear, and then a little air must be given in warm sunny days. If the sun is very bright I throw a little earth on the glass to shade it a little. When the plants get pretty

large, I raise the box by putting a block under each corner, and let them run out, the box can remain until the weather is settled and warm. If your readers will treat their melons in this way they will never fail. Treatment for Watermelons and Muskmelons the same.—A LOVER OF MELONS.

We know of no better way of growing melons in this locality than that described by our correspondent. Further south such care is not necessary to secure a crop. We give an engraving of one of these home-made boxes, with a light of glass for a top, and also of one made entirely of glass set in iron or wooden frames. The latter were formerly kept for sale by florists, but the simpler kinds have so far superceded them that, perhaps, they are not now manufactured to any extent.

#### WILD FLOWERS OF ALABAMA.

MR. JAMES VICK:—I am sure none of your readers appreciate the MAGAZINE more highly than I do, nor welcome its beautiful colored plates and flower gossip with more delight. What would I do without it? I intend to write you after a while of the success of my flowers raised from seed, but now I will only say how I love the MAGAZINE, and tell you of a few wild flowers. One we call Swamp Lily\*—white, very fragrant and beautiful; the foliage rank, and pretty for planting around ponds for Lilies. The plants grow in great numbers near water, in marshes, in shade and hot sunshine, blooming about August. Another† is a perennial, grows in rich, rocky places, and is called Indian Pink. The leaves are somewhat sticky to the touch, like Phlox; the flower is of a dazzling scarlet, growing in clusters on the stem—five petals deeply notched on the edge. This is quite pretty and easy to keep. Then there is a tuberous root, with three grayish green leaves in a whorl; this is crowned with one cinnamon-colored bloom, smelling like a banana. The plants grow in deep loam, and are truly ornamental in the shade. I would like you to name these.

Our mountains are beautiful now with Yellow Jasmine, White Ash, whole acres of Calycanthus shrubs in flower, Sweet Williams, Pinks, Woodbine, Azaleas, Ferns and, besides, many unnamed wild Pansies, as large and rich as cultivated ones. I would like to have you tell me the name of a graceful flower‡ I found last week in one of my rambles. The plant must come from seed as there are a great many little ones around the one in bloom. The leaves are very much like Cos Lettuce, the flowers grow in clusters on a long, slender stem, and in shape are very much like your illustration of Cyclamen. I was sure it was that until I found it had no bulb. The petals are white, stamens purple, and only slightly fragrant.

We have whole fields of delicate pink flow-



ers that endure the hottest weather and resemble *Agrostemmas*. I found, lately, in a swampy shade, a plant much like night-blooming *Jessamine*, only the flowers are pale blue, and the root is exactly like *Perennial Phlox*. Can you tell me what it is?

I think *Phacelia* is a beautiful blue flower. I am sure that every one who grows it will be charmed with the delicate sky-blue flowers and elegant foliage. It grows with us self sown.

Two years ago we got some *Anemone* roots. They came up well, and in a week or so shriveled up like they were scorched, and died in spite of us. What was the matter? My *Pearl Tuberose* did the same way when half in bloom.

Do your readers know how to make large baskets, for *Verbenas* and *Petunias*, with stakes driven down in a circle and woven in with *Grape-vine*? My uncle once made some pretty frames and summer houses with cane and a narrow plank with holes bored through it, tying the tops securely together after running the canes through the holes, and sticking the large ends into the ground. I saw a pretty hanging-basket made of hickory sticks built like a pen, confined with wire at the corners, and a bottom secured of plank.—MRS. W. A. S., *Belgreen, Alabama*.

\* Very likely some species of *Pancratium*.

† Undoubtedly a *Silene*.

‡ Probably *Dodecatheon Meadia*.

#### FORCING LILIUM CANDIDUM.

MR. VICK:—I have never seen directions in your MAGAZINE for winter-flowering of *Lilium candidum*, or common White Lily. Mine do so nicely that I think others would like to try it. I had nine perfect blossoms on one stalk this season. After they die down, in July or August, place the bulb in rich soil in a six-inch pot, and sink to the rim in the soil. Let it remain till cold weather, then raise the pot, so it will not freeze in, and let it stand out doors until severe cold weather comes, giving it quite a taste of winter. Bring in and give it ordinary care with other plants. If it requires any special treatment I have never found it out. Mine do well and are a perfect delight. I hope others will successfully try them.—A. D.



#### THE BRACHYCOME.

One of the prettiest little blue flowers I am acquainted with is the *Brachycome iberidifolia*, pretty both in flower and plant. The flower is single, Daisy-like, and, I believe, belongs to the Daisy family, and is sometimes called *Swan River Daisy*, because it was first found on the banks of the *Swan river*, in *Australia*. The plant is compact, thickly branched, and the leaves are deeply cut. Its height is only about eight or nine inches, and the flowers are very abundant. They are of a brilliant blue, with a dark eye, and something like the *Cineraria* in appearance, though more than twice the size. There is a white one, but I do not like it so well



as the blue; indeed, almost any white single flower looks thin and papery, and reminds one of our roadside *Daisies*.

Last summer I made a clump, or mass, of these plants, making a small, round bed, not much more than four feet in diameter, and set the plants from seven to eight inches apart, and it made such a pretty blue bed that it attracted a good deal of attention, and, really, no one seemed to know the name of my very simple pretty flower. I would not have been wiser than the rest, only that, a few years ago, I saw a little bed of these flowers in the garden of a friend, while visiting in *Massachusetts*. Since that time I have every year endeavored to have a few plants, and have also taken a little pains to learn something of its home and history.

Sometimes I sow the seed in boxes and transplant when the plants are some two inches in height, but this season I have a corner of a cold-frame for them, and they seem to be growing stronger than usual. If any of your readers can tell me of anything that will make a prettier blue bed I will be very much obliged, and will give their recommendations a fair trial, for I do like blue flowers, and they are exceedingly scarce among annuals.

The *Candytufts* are among the most useful of our annuals, and flower freely. There is no blue, but some very pretty purples, and I had, last year, a variety that might be fairly called bright pink.—S. I. T.



## THE SWEETEST EARLY FLOWER.

How we do love the earliest flowers of spring, that greet us with their bright faces. The Snow-drop would be nothing if it bloomed in June, nor do the children gather Dandelions in July. When, however, a flower combines a trinity of good qualities, like the Trailing Arbutus—earliness, beauty, and fragrance—there seems to be nothing more to be desired, and we all go crazy after it, and want to find and keep and cultivate it. The latter we may never do

## PRIVATE CONSERVATORIES.

MR. VICK :—Knowing that you are alive to all improvements, and the introducer and champion of many, I wish to call your attention to a matter which struck me very forcibly when traveling in Europe about a year ago, that is, the difference in the conservatory, or greenhouse, of our country and those I saw abroad. I do not mean commercial houses, where plants are for sale, for in this respect, so far as I have observed, we certainly equal anything in the



successfully, for its home is in the woods, and there we like it best. Providence, however, has given us a flower almost, if not quite, equal in earliness and beauty, and quite superior in fragrance, in the little Sweet Violet. How burdened it must be with fragrance, when a single flower will perfume a room and cause every one to exclaim, "What is it that smells so sweet?" This little flower is also hardy, and will grow and bloom and increase with the simplest care. Any one would be ashamed to ask a plant to do with less. I hope all the lovers of flowers who read the *MAGAZINE* will obtain a plant or two of Sweet Violets. Some of the branches that touch the ground will make roots, and thus form new plants. In this way my few plants have increased to a goodly number, so that I have not only enough for myself, but am able, every autumn and spring, to accommodate my friends with plants.—EVA, *Batavia, N. Y.*

world for abundance and variety of plants, though we may not have as many well-grown large specimens. I refer to the plant houses of gentlemen of wealth, made for their pleasure and the pleasure of their friends. I know there are some in this country, notably in the neighborhood of Boston, that are what they should be, but my opinion is from ordinary observation, that twenty-four out of twenty-five are more fit for commercial uses than for gentlemen of leisure and pleasure. They are usually crowded with a large number of small, insignificant plants, that could be bought of any florist for fifty cents each; with narrow walks, disagreeably damp, and often not scrupulously clean, so as to be pleasant for ladies. Such houses may furnish cut flowers for the parlor, and gifts for friends, but are not pleasant winter gardens, such as I think would be much more satisfactory. I would like your opinion on this matter, for, no doubt, you have observed the



facts which I have presented, and may have alluded to them in the *MAGAZINE*, though I have not noticed anything on this subject the past year.—G. M. W.

We have published our views on this subject, which correspond mainly with those of our correspondent. They were given, with illustrations, in the November number of 1878.

#### THE CHERRY.

I should like to learn, from whatever source I may, why it is that, when but few Cherries set on the trees and many blooms come to naught, the few are not more perfect than when the trees set full of fruit? If a tree set full of fruit, and, after it has attained some size, it be thinned out, what is left becomes more perfect; but if thinned by whatever causes the bloom to abort, what is left generally come to little, and, if left late on the trees, almost always become wormy. To know whether we are going to have a crop of Cherries, we do not need to inspect the bloom, but must wait to see the fruit ahead of the leaves in forwardness. We need not peep closely among almost fully expanded leaves to see how many Cherries we can count in a given space, but if the breeze raise the half-formed leaves the "crop" is the main thing we see, and then, though the fruit may be small, it is always perfect and, weather permitting, clear of specks of rot. I consider the Cherry, when in perfection, the most delicious as well as the most delicate fruit grown; and there are but few varieties but what may be canned or desiccated to retain all their fine flavor. I look forward to these means for a more permanent marketable value for the Cherry, though we may not secure a crop every year. As it is, the uncertainty of a full crop, and the very perishable nature of the choicer varieties, subject the producer to the necessity of dealing with irresponsible parties to help away with them, who help themselves to the lion's share of the profits.

The Cherry tree is a good grower in almost any clay soil, but very delicate about a flow of water at the roots, or a summer sunshine upon naked limbs and long bodies. They luxuriate on good dry and deep subsoils, and I hope the time will come when they will be more generally appreciated and the fruit become a permanent article of commerce. I know of no foreign fruit that compares favorably with the dried Cherry, and the labor of plucking and drying can be mostly performed by encouraged children and weak farm hands and women.

There is one thing more I would call the mind of fruit growers to in this connection. It is the fact that nature will have her way at last in spite of all the liberties she allows us to take of her yielding accommodations. We inter-

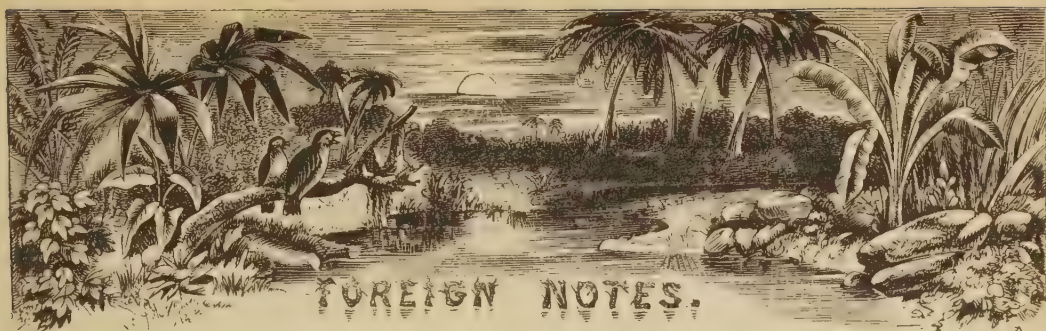
marry different varieties and produce seedling hybrids (once in many trials) of very choice qualities; but this is at the expense of hardihood. Not satisfied with this, as who ever was, satisfied with anything, we plant the scion of our choice variety in the root of another variety to save us time and disappointment from planting the seeds, and think it not asking too much of Dame Nature to ratify our irregular proceeding. But stop! she is not cheated, but only accommodating to our whims. Though we may prolong a life by the infusion of young blood into old veins, our powers are limited and nature's seed must be again resorted to, and that in a new variety, for the old has been allowed to run out. Everything lives by constitutional possibility and has a limit to its age from the seed, do what we may with it in the meantime.

Long as is the life of a tree from its seed, in good soil and under favorable circumstances, and long as we may nurse it with new life from other seed, it is not perpetual but comes to an end at last; and then we say, the climate is changed, or the soil is deficient in something we know not how to replenish; but the fact is its age from seed, and nature's law is past never to return in exact variety. In the vegetable, as in the animal world, the fittest will survive. One part of nature gives way to another; and this seems to me to be the reason why, when the fruit buds get a check, the foliage buds take the lead; and vice versa, if the fruit buds are plenty and in perfection the foliage buds are thereby checked and the crop secured. Of course, ideas, though backed by observation and experience, are not infallible, but, such as they are, let them be considered.—SIGMA.

#### THE EVERLASTING FLOWERS.

I thought when sending my subscription this year I would tell you about my success with everlasting flowers. I had four kinds—only a paper of each. The seed was sown with care, and the plants came up pretty well, though of one kind I had only about half as many plants as seeds sown—that was the *Acroclinium*. This, however, is the prettiest of all, if gathered just as the bud opens, and dried in the shade. *Gomphrena*, or Globe Amaranth, will grow as easily as any flower I ever cultivated, and gives a very large number of flowers to a plant. The *Helichrysum* is a strong, rampant grower, and an excellent double flower, mostly yellow and dullish red. The *Ammobium* is a pretty little double flower, pure white, and very nice for making into floral ornaments. My everlastings afforded me lots of pleasure last winter, and my friends also, I think.—ELLEN P. W.





### WONDERFUL THINGS.

An old and celebrated showman, whose name is familiar to all, said that the American people liked to be humbugged, and this seems to be true. How many people have bought blue Roses, and scented Turnip seeds that were to produce flowers of surpassing fragrance, and many other wonderful things, of irresponsible and deceiving dealers. This, however, is not confined to America, for human nature is a good deal alike all the world over. The *London Gardeners' Chronicle* copies the following advertisements from an English journal, which would seem to show that our cousins over the water enjoy the luxury of being cheated about as well as our own people, and have no difficulty in being accommodated:

"Nice bulbs of the Indian Shot-plant, very ornamental, and produces masses of white flowers bearing shot-like seed resembling bullets—a great novelty." We should think so. Here is another. "Novelty in Roses—Empress of India—blossoms twenty-four inches in circumference, color rich velvet-crimson. Strong plants, price 2s. each, free." Another advertiser "can still spare some well-rooted plants of the Empress of India, which grows two feet in circumference; also the new black Rose, both great novelties; 2s. 6d. each, free, or the two together for 4s." The black Rose seems to be plentiful; here is another offer:

"The wonderful black Rose, each petal positively rich black; strong plants, 2s. 6d. each. Also the largest Rose in the world, produces flowers twenty-four inches in circumference, and very double. Plants 2s. 6d. each. One good plant of each of the above free for 4s."

† A "new and beautiful scarlet Passion-flower for window or greenhouse, almost hardy, and large double flowers, nice little plants," is offered by the same lady who deals in white-flowered Indian Shot-plants with shot-like seeds resembling bullets.

"Novelties. — The wonderful new Bean, Bolster-case, produces pods from nine inches to twelve inches in length, look like long Cucum-

bers hanging from the stalk; delicious vegetable. Twelve Beans free for 1s. 6d. Also the new Pea, Cleopatra's Needle; grows pods six inches or seven inches in length, and an enormous size. Thirty-six Peas free for 1s. 2d."

"Scarlet Musk; one, 1s.; two, 1s. 10d.; three, 2s. 6d., hardy strong roots, free."

"American Healing; cures all bruises, swellings, burns, &c.; evergreen, hardy. One root, 1s., or three, 2s., free."

### SALAD PLANTS.

Very many cultivate nothing but Lettuce as a Salad plant. Endive was strongly recommended by many members of the Western New York Horticultural Society, at a recent session. A correspondent of the *Journal of Horticulture*, of England, considers Chicory superior to either as a winter salad.

"For supplying salad from November to April, Chicory is the most useful plant with which I am acquainted. Lettuce or Endive cannot be compared with it. Many who have grown these crops during the last two autumns with the hopes of having a supply during the winter have failed to obtain a single plant fit for use at the time they are most needed. Good Lettuce or Endive at all times should be sweet, tender, and crisp; but how very seldom do we find winter Lettuce and Endive in such condition. More frequently do they appear unblanched, tough and flavorless. Few Lettuces will fold in to form heads during the winter, and when they are tied up like Endive they soon decay in frosty or wet cold weather. Lifting and storing them under cover does not always prevent that result, and very often the produce does not pay for one-quarter the labor bestowed on them.

"Chicory, on the other hand, is not subject to these disadvantages. It is extremely hardy, and will bear a reasonable amount of ill usage without suffering. It is very easily propagated from seed, which may be sown from the middle of April until the end of June. I sow it in ordinary garden soil, in drills two inches deep



and from one foot to fifteen inches apart. The seed soon germinates, and as soon as the plants are from two to three inches high they are thinned out to six inches apart. After this the Dutch hoe is run amongst them every alternate week.

"About the latter part of September and during October the leaves assume a yellow hue and commence decaying. As soon as they are all decayed the small Parsnip-like roots may be lifted and started into growth to supply their delicate Lettuce-like leaves, which are so valuable as a salad. Six to eight roots are placed in an eight-inch pot, any garden soil being employed, leaving only the crown above the soil. They are then watered and placed in a warm cellar, or anywhere in the dark, and in a temperature of 40° or 50°. The crowns soon start into growth and throw up long cream-colored leaves, which are as tender and well-flavored as any one could wish the best Lettuce to be. One or two dozen pots full will give a supply daily for some months, and the plants never show the slightest sign of decaying or seeding.

"Any one with a piece of ground to grow Chicory in during summer, and a cellar to keep the plants in throughout the winter, may have fresh salad all the year round, as the green leaves may also be used in this way during summer. The roots are not worth much after they have been lifted once, but those which may have been left in the ground are as good for lifting the second winter as the first. This, however, is of little importance, as the plants are so easily raised from seed and grow so fast that any one may raise a number of them annually without much expense or trouble."

#### DRESSING FOR LAWNS.

In this country we need water to keep our lawns green through the summer, like English lawns. Without watering during August they usually get brown enough. The too common practice of covering lawns in the autumn with manure, giving them the appearance of barnyards nearly half the year, in most cases does no good, and often is a positive injury. The following suggestion from the *Gardeners' Chronicle* are not without value in this country, as we know by experience:

If some parts of the turf has a yellow, sickly tinge, it is for want of support, and a dressing of soot, wood-ashes, or guano, applied immediately before rain, would soon change the hue, and so stimulate the growth of grasses, that Daisies, Plantains, &c., would have but little chance. If worms are troublesome, the best antidote is lime-water. There need never be any fear of getting it too strong; we usually

put a wheelbarrow load of fresh lime in a large tank of water, and as soon as clear it is ready for use. Showery weather is the best time to apply it, as the ground being soft, less water is required to bring the worms to the surface; they may either be picked up at once or left to die, and be swept up next day; after which well roll, and the improvement of the turf will be visible in a very few days.

#### AMERICAN ROSES.

The editor of the *Journal of Horticulture*, when speaking of the interesting paper on Roses read before the Western New York Horticultural Society, by H. B. ELLWANGER, Esq., and which was published in the June number of our MAGAZINE for 1879, says: "America, as Mr. H. B. ELLWANGER points out in his interesting paper, is the native home of the Noisette class, and has already given the world America and Isabella Gray (the latter, alas! bewitching but impracticable), also Teas, President, Isabella Sprunt, and others not yet known here. In the south their facilities for ripening must be fully equal to that of the south of France, and when American energy once grapples with a subject there is sure to be rapid progress. The other indigenous class referred to is that of Prairie Roses; these are almost wholly unknown over here. Perhaps they answer more to our class of Scotch Roses. In both cases, we incline to think, a series of judicious blending would be likely to produce something both new and attractive."

#### STANDARD ROSES.

Standard Roses, or Rose Trees, with a clean stem three or four feet in height, have been popular in Europe, and considered very pretty, though we could never see much beauty in the unnatural umbrella-like top. We were quite sure they were unsuited to the extremes of climate, both summer and winter, in a large section of our country. They have proved, however, quite a bonanza in the hands of ignorant and unscrupulous tree-sellers. The severe winters of 1878 and 1879 in England have proved that they are unfit even for that country, about eighty per cent. being destroyed both winters. One Rose grower declares that he saved only those that were protected by wrapping the stems with dry hay and earthing up with old manure, so as to have the shoots just peeping out.

FLORIDA ORANGES.—Florida Oranges were for sale at Covent Garden, London, in April, and the editor of *The Garden* praises their quality. He was presented with one that measured ten inches in circumference.



## THE DAFFODIL.

In a lecture delivered before the Royal Horticultural Society of England, SHIRLEY HIBBERD thus speaks of the Daffodils, comprising the whole of the Narcissus family: "The collective term Daffodil, which, in rural districts



NARCISSUS POETICUS.

often referred to as Lilies, and one of our old English names for the large yellow trumpet section is Lent Lilies, which refers to their season of flowering. Poets have hailed them as amongst the most delightful flowers of the spring, prefiguring in their golden splendor the sunshine of the summer and the profusion of its fruits.

"The Narcissus takes its name from a blooming youth, son of Cephissus, who, being beloved by Echo and a crowd of nymphs, turned aside to make love to his own shadow in the fountain, and achieved immortality by



DOUBLE NARCISSUS.



TRUMPET NARCISSUS.



POLYANTHUS NARCISSUS.

meeting death in the sparkling stream. From his delicate corpse sprang the beautiful flower which forever wears around its heart a blood-

stained girdle of remembrance. It is the fair white flower with ruddy annulus, known by distinction as the Poet's Narciss, or Narcissus poeticus, that represents the story."

## PARSNIPS.

The value of Parsnips is not understood in this country, particularly for feeding purposes. Americans who visit Europe this season should include the Channel Islands, Jersey and Guernsey, in their journeyings, and they will come back with much more intelligent ideas of the value of this root. A writer in the *English Garden* thus suggests their growth in Ireland, so as to some extent to take the place of the Potato. "One would have thought that, with the great uncertainty attaching to the Potato crop, Parsnips would have come more into requisition than they appear to have done up to the present, as they are not only more nutritive than Potatoes, but they will grow and flourish in soils and situations in which the latter would become diseased and worthless for eating. Irish people seem to depend almost entirely on Potatoes; but if they would only turn their attention more to Parsnip growing, much of their distress during the past winter might have been averted, as the yield in weight from such a summer as last would have been something enormous, the wet having just suited Parsnips and swelled their roots out to a considerable extent. Although they may not come quite so large during a dry season, they never fail, and are, therefore, a most profitable crop to grow either in fields or gardens; for should the whole of them not be required for use as vegetables, they are valuable for cattle feeding, for which they are largely cultivated in Guernsey and Jersey. Many years ago Potatoes did not come much into consumption, but now a dinner is not considered complete without them; and, after a time, when prejudice has worn away a little, it may be so with Parsnips. The flavor is considered objectionable by some, but by daily use one soon acquires a liking for them, and if we have a few more turns of such a scarcity of vegetables as we have had for many months past, we shall train our palates in such a way that Parsnips will not come amiss to us."

DEATH OF MONS. SOUCHET.—The well-known florist, MONS. SOUCHET, recently died at Fontainebleau, France, aged sixty-eight. About forty years ago this gentleman undertook the improvement of the *Gladiolus*, and to him we are indebted for many of our best varieties, some of which bear his name; in fact, it may almost be said that he created this beautiful and popular garden flower.



### A GRIM DISCOVERY.

A startling surprise, after the fashion of the story of GINEVRA, was experienced some days ago by a party of Styrian woodcutters in the forest of Drommling. They began to fell a venerable Oak, which they soon discovered to be quite hollow. Being half decayed it speedily came to the ground with a crash, disclosing a skeleton in excellent preservation. Even the boots, which came above the knee, were almost perfect. By its side was a powder-horn, a porcelain pipe-bowl, and a silver watch, on which was engraved the name, "H. von Krackowitz, 1812." The teeth were perfect. It would seem to be the skeleton of a man between thirty and forty years of age. It is conjectured that, while engaged in hunting, he climbed the tree for some purpose, and slipped incautiously into the hollow trunk, from which there was no release, and he probably died of starvation.—*London Times*.

### MOCK GRAFTING.

FORTUNE, in one of his letters to the *Gardeners' Chronicle*, from China, reported a curious practice of mock-grafting. In the course of his wanderings he met with a Juniper, such as the Chinese are so fond of planting around their graves. "But although a Juniper at the top and bottom, an evergreen tree with large glossy leaves, *Photinia serrulata*, formed the center." The *Photinia* came out from the trunk of the Juniper about twelve feet from the ground, and appeared as if it had been grafted upon it. And such was the belief of the natives, but on examination it proved that the *Photinia* was rooted in the ground, and had twelve feet of its stem cased in the trunk of the Juniper.

DEATH OF ROBERT FORTUNE.—On the 13th of April the celebrated botanical collector, ROBERT FORTUNE, died in London, aged sixty-eight. To this indefatigable gentleman we are indebted for the introduction to our gardens of many excellent plants, among which are *Lilium auratum*, *Dielytra spectabilis*, *Forsythia viridisima*, *Wiegela rosea*, and Japanese *Chrysanthemum*, in all about ten hundred that are enriching the gardens of Europe and America.

FRUIT TREES IN PASTURES.—A foreign writer recommends the growing of fruit trees in pasture lots. To protect the trees when young from cattle, he drives two or three stakes into the ground, and then winds them with thorn brush. The barbed wire now becoming common would be much better and more permanent than the thorns.

### CABBAGE BROCCOLI.

The English papers are discussing the merits of a hybrid between the Cabbage and Broccoli, known as Cabbage Broccoli. "In its outward appearance is resembles a well-grown conical-headed Cabbage, but on being cut through a good-sized flower head was discovered, much resembling a good head of sprouting Broccoli enclosed, so to speak, in the heart of a Cabbage. When cooked it was found to be very good indeed, the heart imparting to the Cabbage portion a rather strong but perfectly agreeable Broccoli flavor."

EDELWEISS.—A foreign correspondent enquires if the Edelweiss, so prized by travelers in the mountains of Switzerland, and taken home as souvenirs of their exploits, is similar to the Snow Plant of the Sierra mountains. The Edelweiss is a *Guaphalium*, of the same family as the French Immortelles. The Snow Plant of the Sierras is *Sarcodes sanguinea*, of a texture like the Indian Pipe, or Mushroom, and cannot be preserved.

TREE PÆONIES.—An English writer urges the more general planting of the Tree Pæony, especially as single plants in the center of beds, in groups in the front of shrubberies, and at the back of widish borders, or on lawns, in which position there are few plants so showy. Autumn, it is claimed, is the best time for transplanting.

FRUIT BLOSSOMS.—The fruit trees of England are giving very few blossoms. This is supposed to be the effects of the last wet and cold summer. At the present writing the orchards of Western New York are a wonder of beauty. Never were fruit blossoms so abundant, we think.

BEE KEEPING IN IRELAND.—The benevolent Baroness BURDETTE COUTTS and others are endeavoring to introduce Bees into Ireland. A traveling tent is to be sent over the country to disseminate a knowledge of the useful art. It will be accompanied by a competent staff of operatives.

KENSINGTON GARDENS.—On Easter Monday the public were admitted to the Royal Horticultural Society's Gardens, at Kensington, at four cents each person. About ten thousand were present, and the receipts amounted to over four hundred dollars.

MANURE FOR BULBS.—The Holland growers say, always use cow manure for Hyacinths and horse manure for Tulips.





### AMARANTH SUNRISE.

One of the most beautiful foliage plants we have ever seen is Amaranth Sunrise. It came with some other seeds from Japan, but only one plant proved remarkable for its beauty. For several years we cultivated it, until every plant proved true, the crown being of a brilliant flame color. Another difficulty, not so easily overcome, seemed to be a feeble constitution; not more than half the plants seemed to be robust, the remainder appeared sickly, and when about half grown would gradually fade away. At the time of introducing it, we made the following remarks respecting this plant:

"It is a pet we have been cultivating for several years, in the hope, not that it would become more beautiful, for it was quite handsome enough from the first to entirely satisfy us in this respect, but knowing the fickle nature of the Amaranthus tribe, and how easily led astray, we were exceedingly anxious to see its good qualities established, so that persons who sowed seeds would have good reason to expect a reasonable number of highly-colored plants. In this respect our hopes have been realized, and we are quite sure that at least ninety per cent. will produce brilliant plants, quite as good as that shown in our colored plate. There is one difficulty, however, which we have not been able to overcome. Plants will start well and grow well, yet, without apparent cause, many will die. A year or so since we named this variety Sunrise. We have shown it at several State fairs, and no plant we ever exhibited attracted so much attention as this."

The May number of the *Gardener's Monthly* contains the experience of a lady, of Yarmouth, Maine, with this plant. "In Mr. VICK'S MAGAZINE for December, 1878, there is a colored plate of this new Amaranth. The lower leaves are of a purplish red, and are crowned with leaves of brilliant flame-color. With his usual caution, Mr. VICK delayed making it known for several years to the public, lest it might not be sufficiently constant to satisfy purchasers. Last year I procured a paper of

seed, and was delighted with the results. Although few were like the one represented in the plate, yet all were beautiful and greatly admired by all who saw them. Some of them had leaves partially of the brilliant color, and part of the purple, then the crown of sunrise. These handsome foliage plants, with the Coleus, do wonderfully heighten the effect of a flower garden."

### HYBRIDISING—HARDY VINES.

MR. VICK:—I am only a new subscriber to your MAGAZINE, yet it is with interest I read its columns, especially that portion devoted to questions and answers.

1. Can you give me a few brief rules for the hybridizing of plants, sufficiently explicit to guide an amateur, such as, what plants hybridize and what not; when, and under what conditions is hybridizing accomplished, etc.?

2. What evergreen vine of dense foliage would you recommend to train over a trellis for the purpose of protecting a small flower garden from the severe north winds that sweep over this portion of the Sacramento valley, which are, in summer, dry, hot and parching, like the real simoon, and in winter, cold, blowing from the mountains of perpetual snow. Roses which stand the worst freezing we have, wither and blacken, both flower and foliage, under these severe gales. Even Petunias must be protected from the wind. On this account, we can have but few flowers of any kind, and these must be of very low growth—Portulaca, Verbena, and the like. The wind-break must be where a broad fence, hedge, or trees would be awkward and out of place.—F. S. K., Woodland, Cal.

1. Plants exist in natural groups, or families. They can be hybridized only by plants of the same family. The natural groups, or families, are usually composed of several smaller groups, called genera. The genera bear the great family likeness, but also differ from each other. Each genus usually has several members, called species. Hybridization may occur only between plants of different species belonging to the same genus. Hybridizing may be performed accidentally or by design. It sometimes occurs, undoubtedly, by the agency of the wind and of insects. When done by design, the flower that is intended to be operated upon must be carefully watched and, the moment the bud uncloses, the stamens should be carefully removed to prevent the action of its own pollen. Then

with a small, camel-hair brush some pollen is taken from the anthers of the plant selected for the purpose, and carefully placed on the stigma of the pistil of the flower to be hybridized. This is the extent of human agency in the matter, and when the pollen-grain extends itself like a thread and passes down into the ovary and penetrates an ovule, the whole process of hybridizing is complete. The produce of the seed of the hybridized plant should combine to some extent the characteristics and qualities of both the parent plants.

2. We do not know of any vine certain to stand the test required. The Virginia and Trumpet Creepers will bear a good deal of hard usage. Some of the strong-growing Grapevines might answer. Some kind of a rustic building or greenhouse might be made to look well and furnish the needed shelter.

#### ONION MAGGOT.

I find that the grub at the root of the Onion crop does a great damage about June or July. If you, or any of your readers, can give a cure, you will confer a great good to Onion raisers. By what I read, they are destructive in other places as well as in Canada.—W. F. C., *Orwen Sound, Ont.*

The enemy complained of is the larva of the Onion-fly, *Anthomyia ceparum*. The fly lays its eggs in small clusters on the leaves. Here they remain a short time, but when nearly ready to be hatched they fall to the ground. As soon as the larva leaves the egg it finds its way to the Onion bulb, and penetrates it, and gnaws towards the center. The result is, the plant soon begins to turn yellow and the bulb to de-



cay. The maggot remains in the Onion fourteen days, at the end of which time it has attained its full size, and then leaves the bulb and enters the ground, where it undergoes a change and, at the end of a fortnight, during the warm weather, it comes out a fly or perfect insect. The same process is now repeated and the Onion crop thus suffers the depredations of several successive generations of the insects. In the fall, when the weather becomes cool, the pupa, instead of emerging from the ground, re-

mains there, and comes out only when the springtime warmth calls it forth to active life.

HARRIS says the fly is "ash-colored, with black hairs sparingly scattered on its body. It has a rust-colored forked spot on the top of its head, and three rust-red lines on the thorax, and the wings are tipped with yellow near the shoulders. It measures one-fourth of an inch in length."

Onions raised on new ground have a better chance to escape the attacks of this insect than a crop on old Onion ground. As soon as a plant is noticed to turn yellow, or to be unthrifty, it should be pulled up and burnt; if this is carefully attended to through the season, the insects may be materially checked. Dressings of lime, salt, charcoal, and ashes, made soon after the seed-sowing, have each proved of some value as preventives, the greatest advantage being derived from charcoal.

#### HAWTHORN HEDGE FROM SEED.

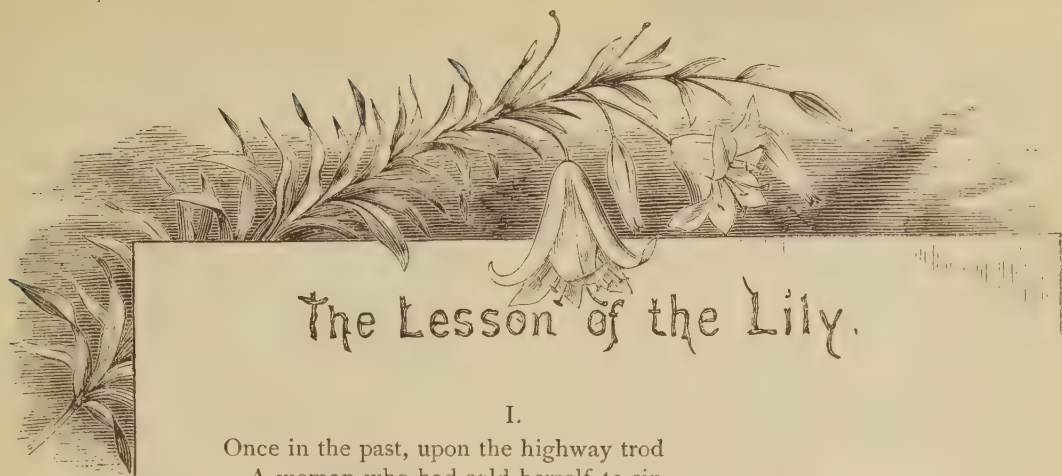
Will you please say how Hawthorn seed should be planted, and how long before a hedge, say three feet high, could be raised from the seed?—J. T., *Yarmouth, Nova Scotia.*

The seed of the Hawthorn, *Crataegus oxyantha*, should either be sown as soon as gathered, or be mixed with sand and kept over until the succeeding fall, and then sown.

If sown when first gathered, the seed will remain dormant in the seed-bed the first year and germinate the second spring. On account of this long delay in germination, it is a common practice to mix the haws, or fruits, with sand when the crop is gathered, and the heap, in an out-of-the-way place, is allowed to remain a year. It is often turned over to obviate the danger of heating, and in the fall the mass is gathered up and sowed in the seed-bed. If desired, the seed can first be separated from the sand by means of a sieve, but commonly, seed and sand are scattered together into a broad drill, about six inches wide, covering it from a half inch to an inch in depth. The next spring the young plants will appear and should be given good and clean culture during the summer. The next spring the young plants may be lifted and transplanted to the hedge-row; and in five or six years, with proper management, may appear a hedge four or five feet high.

CARE OF TULIP BULBS.—Last season I took up my early-flowering Tulips in June, because I wanted to fill the bed with Verbenas. The leaves were greenish, but appeared somewhat dry, with a tinge of brown, and although rather afraid, I risked them. The bulbs were full size, but nearly white, turning brown when dried in the shade. I never saved better bulbs.—ETHEL.





## The Lesson of the Lily.

### I.

Once in the past, upon the highway trod  
 A woman who had sold herself to sin—  
 Full little know we what she might have been—  
 She scorned herself, her fellow-men, her God.  
 Her sad eyes spied upon the winter sod  
 A withered root that seem'd to claim no kin  
 With leaf nor bloom. Then laid she, sighing low,  
 This root, as symbol of her own lost truth,  
 Within her breast: the germ was there, and so,  
 After a time, a tender leaf, forsooth,  
 Burst forth! "Ah, now," she cried, "poor root, I know,  
 Thou'lt grow and blossom with a new-born youth."

### II.

She set it in the earth and drop'd a tear.  
 She saw the fresh leaves open day by day.  
 "Ah! root," she cried, "that lay beside the way,  
 It may be thou wert sent to draw me near!  
 Scorn'd and condemned, it may be God may care  
 For me! If thou dost bloom, thy bloom shall say  
 Thou hast forgiveness from the Lord, the King—  
 Grace for the soul that thou hast kept so ill."  
 The sweet wind touch'd it with a tender wing,  
 Warm, loving suns did kiss the green bud stilly;  
 God sent, as answer to the outcast thing,  
 Amid the leaves a pure and unstain'd Lily.

—H. E. W.

## THE STREAM OF LIFE.

Oh silvery streamlet of the fields,  
 That flowest full and free,  
 For thee the rains of spring return,  
 The summer dews for thee;  
 And when the latest blossoms die  
 In autumn's chilly showers,  
 The winter fountains gush for thee,  
 Till May brings back the flowers.

Oh! Stream of Life! the violet springs  
 But once beside thy bed;  
 But one brief summer, on thy path,  
 The dews of heaven are shed.  
 Thy parent fountains shrink away,  
 And close their crystal veins,  
 And where thy glittering current flowed  
 The dust alone remains.

—BRYANT.

### HEDGING AND EDGING.

1. What can I get that is fine and pretty for a small garden hedge?

2. Is it well to border a bed with sod?—G. W. L., *Battle Creek, Mich.*

In the selection of plants suitable for forming low hedges that are not desired to be defensive there is quite an extensive range for our choice. Among evergreens the plant particularly prominent is the *Arbor Vitæ*. The American *Arbor Vitæ*, *Thuja occidentalis*, is now very generally employed for ornamental hedges in most parts of the country; from Maine and Michigan on the north to North Carolina and Tennessee on the south it appears to thrive well and to be admirably adapted to hedging purposes. From some reports, we judge its useful character will not be sustained in some parts of Kansas, Colorado, and some other parts of the western plains, as, apparently, the climate is not suited to it, and when planted it soon becomes unthrifty. The Siberian *Arbor Vitæ*, a variety of the American, is preferred by some on account of its dense foliage; but as this variety is propagated entirely by cuttings, it is much more expensive, and the advantage of it is not sufficient to warrant the greater cost. The Tom Thumb *Arbor Vitæ*, another sport, or variety, of the American, discovered in a bed of seedlings, and preserved, propagated and disseminated some years since by ELLWANGER & BARRY, of this city, is very low-growing, or dwarf sort, and with it may be formed hedges of a foot and a half or two feet in height.

By some the Red Cedar, or *Juniperus Virginiana*, is employed, and probably it succeeds better in some sections than in others; our own experience with it is not very favorable, as it does not bear the shears well enough to be satisfactory. When used as a screen, it is probably best to plant sufficiently far apart for a fair development of the individual plants, and to clip them very sparingly.

Many of the flowering deciduous shrubs make very pretty hedges. Formerly the Privet, *Ligustrum vulgare*, was quite generally used for hedging, and we know of nothing better, when it is thrifty. All throughout Western New York it has been abandoned on account of blighting; we are not aware that this disaster is common to it in all sections, and think it is not.

The *Althæa*, *Hibiscus Syriacus*, makes a fine ornamental hedge, and in the latter part of summer is covered with its large and bright-colored flowers.

The Japan Quince, *Cydonia Japonica*, is an admirable hedge plant, not only for its beauty, which is exceptional, but on account of the thorns it is furnished with. In spring it bears a profusion of brilliant scarlet, rosaceous flowers.

The *Spiræas* and the taller *Deutzias*, and the Tree Honeysuckles may all be used for ornamental hedges. They are hardy, will bear clipping well, and are enlivened with their showy blossoms.

Other plants might be named, but those already noticed are desirable for the purpose, not only on account of their peculiar fitness, but because, usually, there is no difficulty in procuring them from the nurseries in sufficient quantities and at reasonable prices.

2. A sod edging, in some places, is very suitable, in others, very unsightly; it should not be generally and indiscriminately used. In the flower or vegetable garden it can seldom be used to advantage. As an edging to a long border by the side of a main walk it is often very serviceable, but should at all times be kept closely trimmed.

### INSECTS—CABBAGE WORMS.

MR. VICK:—I will give you some of my experience, if it will be worth anything. I can manage all the plant pests except the little black gnat and its white worm in the soil. Through the winter my nephew smoked in my room every evening; the smoke kept them down. He has quit smoking and they seem to be making up lost time. Last summer, in your MAGAZINE, you said wheat bran sprinkled over Cabbage heads would destroy the worms. I tried it with perfect success. Nothing else did any good.—MRS. M. G. S., *Rensselaer*.

We admire the good sense of that nephew. He evidently saw that he was "hoist by his own petard," and so very wisely reconsidered.

"He who fights and runs away  
May live to fight another day."

Perhaps next time he will renew the attack by cornering his enemy in a room by themselves while he, himself, keeps outside. It will be just as glorious a victory.

The white worms can be slain with a dose of lime-water.

The wheat-bran remedy is simple and harmless, and we trust will prove as effectual always as it has in this case. Let all the Cabbage-growers give it a trial and report.

### PLANTAIN ON LAWN.

MR. EDITOR:—Will you please tell us in your MAGAZINE how to eradicate Plantain from our lawn? The Plantain did not appear until the second year after the lawn was sown, and we have tried in vain to kill it without injuring the grass.—J. L. C., *Hopkinton, Mass.*

As quick and effectual a method as we know of to destroy this and other weed-pests on lawns is to cut the plant off at the crown, and drop on the top of the root two or three drops of kerosene oil. The lawn will not be defaced by digging, and the work is at once and completely done; the root dies as surely as if struck by lightning.



## LUNGWORT.

Enclosed find a flower and leaf of a plant of which we do not know the name. Please name it for us.—REV. D. M. M., *Indiana, Pa.*

This is a plant sent in to us frequently every spring, and a very pretty flower it is, too, and we do not wonder there is so much notice taken



of it. Its name is Virginian Cowslip, or Lungwort, *Mertensia virginica*. It is a perennial herbaceous plant, growing in many parts of the country and frequently cultivated in gardens; its purplish-blue trumpet-shaped flowers are about an inch long, and are produced in clusters or panicles. The plant grows from one to two feet high and is of the easiest culture.

## WHAT TO DO WITH SOME PLANTS.

MR. JAMES VICK :—I have often thought I would ask you to give me some instructions about my plants, but my questions would be answered in the next MAGAZINE. Now I want to know

1. What to do for my *Hoya carnosa*. It is dropping its leaves. I kept it pretty dry throughout winter. In February I put on a new frame, changing the position of the entire plant, and gave it more water and early morning sun. It is too large to repot, so I removed all the soil I could and put on fresh, and a little liquid manure.

2. How to treat my *Gymnostachyum*. Will it bear manure? Mine does no better under glass than out; it only lives, and drops its leaves.

3. How deep should the *Agapanthus umbellatus* be set?

4. Should Crape Myrtle be repotted before it starts to grow after resting? Mine starts nicely, growing branches two or three inches long, then dies without any change in treatment. They are kept at from 50° to 70°, with a little early morning sun.

5. Can gold and silver-leaved *Geraniums* be kept dry, safely, like *Zonales*. I lift my *Zonales* late, just before hard frosts, and put as many into a box as I can; give the roots a little water two or three times during winter, and seldom lose one.

6. Should *Crinum* be kept growing all the time? I kept mine dry last winter and lost the largest bulb.—MRS. M. G. S., *Rensselaer, Mo.*

1. We expect the *Hoya* will be doing better now the warm weather has set in. It should have been allowed to remain dormant longer,

and not started before the middle of April or first of May.

2. *Gymnostachyum* should be kept comparatively dry and in a cool place during summer. About first of September bring it into heat and start into growth, supplying water as needed. It needs a temperature of 60° to 70° during its active state, and a little weak liquid manure will be beneficial. We do not consider it a desirable plant for house culture.

3. The *Agapanthus* bulb may be placed in the soil so as to be covered a little above the swelling.

4. The Crape Myrtle should be repotted, or at least have a supply of fresh, light soil, enriched with some old cow-manure, before starting to grow.

5. Variegated-leaved *Geraniums*, in their dormant state, may be treated the same as others.

6. After flowering, when the plant is fully matured, the water can be gradually withdrawn from the *Crinum*. The bulb should be left in the pot during the resting period, or through the winter months. It is well never to allow the bulb to become thoroughly dry, but to look after the plant occasionally and give just enough water to maintain a little moisture in the soil.

## SMILAX.

Can you tell me what to do with my *Smilax*? It dries up in the summer, and when I bring it in in the fall it has new shoots, and I really think it will grow. But no! it will cheat me a little while, then the leaves turn yellow and drop off, new ones form, and in their turn fall, and it stays just about so all winter. I have no very good place for plants, but I tried it in a cool, south window, a warm, west, and a scorching east window, with about the same result. Can you tell me how to treat it in summer, and is there any hopes for it at any of those windows?—A. D., *Mt. Carmel, Conn.*

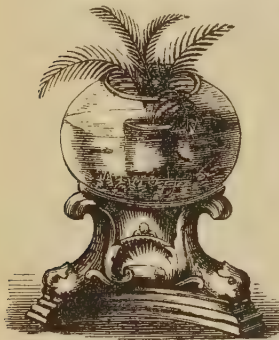
The *Smilax*, *Myrsiphyllum asparagoides*, should be allowed to dry off and stand in a cool place during summer. The latter part of August it may be repotted, watered, and started to grow. It needs a moist atmosphere, a heat of 60° to 75°, and a position slightly shaded from the direct rays of the sun. A good loam mixed with a little leaf-mold and sand forms a suitable soil. Care should be used not to over-water the plant in the early stages of its growth, but when more advanced, and growing freely, a plentiful supply should be afforded.

HYACINTHS IN SUMMER.—Please say to your readers that, if they desire to have *Hyacinths* next season, care must be taken of the bulbs in the summer. If *Hyacinths* are in the way after the flowers are gone, they may be transplanted without much harm, and when removed should remain in the ground until the leaves are entirely dead.—ETHEL.

### GOLD-FISH AQUARIUM.

MR. VICK :—Will you not in your interesting MAGAZINE tell us something about aquariums? Please begin at the beginning and tell what the fish require, how to start the plants, if there is soil in the bottom, how often the water must be changed, and how accomplished. Is it difficult to keep gold fish through the winter, and can it be done without the aid of artificial heat? I would like to start a small, parlor aquarium, and not knowing how to begin, come to you for the information, thinking an article giving full details on this subject might prove interesting to many of your readers. If something of the sort could be gotten up cheaply it might furnish a great deal of pleasure to many whose means are limited, but whose tastes are cultivated, and at the same time encourage a love for the beautiful among those who view the success of their neighbors. MINNIE E. D., *St. Louis, Mo.*

A very suitable reply to the above inquiry is given in the following communication from a lady, and, as it is the relation of actual experience, we know of no reason why others may not follow it with perfect success. We would especially direct the attention of our readers to the remark about feeding the fish. The simple fact is that fish supplied with clear water and a cool temperature have scarcely no other want;

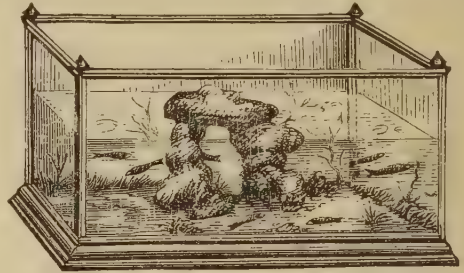


and the omission of all attention to feeding except in the spring months is as great a kindness as can be shown them. In this latitude, from the last of February to first of July, the least crumb of cracker or fish-wafer suffices, and during the

rest of the year experienced fish-fanciers say very little need be given:

"In the care of aquariums I lay claim to having had good luck, and shall not be selfish and withhold the little I know, but give it for the benefit, perhaps, of such as are interested and would care to learn. To those whose means don't admit of expensive luxuries, such as aquariums are deemed to be, I would drop a word of encouragement and suggest a means whereby their desires may be realized and tastes fully gratified at a very trifling expense. An aquarium can be easily made at home when one knows just what is required. Any one with a little ingenuity and the assistance of a handy tinsmith can fit up a handsome and attractive affair, and find himself doubly paid for his time and trouble in the enjoyment experienced, saying nothing about the satisfaction in having accomplished so much. A frame-work may be made of tin to hold the glass, and to this frame a zinc bottom should be soldered. A bottom of wood underneath all is finished nicely with

deep moulding. After the glass has been set and well cemented in, the frame may be painted black, or green, or gilded, as taste may decide. The tank should be filled with fresh water every day until it is thoroughly cleansed, before fitting it for occupancy. Then the glass must be



polished, the bottom covered with clean pebble stones and small shells. A rockery, of rich brown or pure white stones for the center, surmounted by a large shell or two filled with earth, and Lycopodium growing therein. Cover the earth with pebbles and press them down firmly about the plant. After all is arranged, the water can be put in with a dipper, pouring against the glass to avoid a disarrangement of the furniture. Do not feed the fish unless, about once each week, a few crumbs of fish-food or lady-fingers. Every morning dip out two or three dippers full of water, wipe the glass, and fill with fresh water. Use care not to disturb the water more than is necessary. There is no reason why gold fish will not do well if managed in this way. During very warm weather a lump of ice occasionally is appreciated by the little golden beauties, for they can stand the cold much better than the heat. I have known some very curious instances where they were frozen solid, and were thawed out and lived. They are sometimes shipped in this way."

### TRILLIUM.

MR. VICK :—I enclose a yellow Trillium sent me from Kingston, Tenn., where it grew wild. We have the brown, white, and pink Trilliums, but the yellow is new. Will you please give its specific name in your next MAGAZINE.—AN ENQUIRER, *Salem, N. C.*

The specimen received is probably a variation in the size and color of its flowers from Trillium discolor, an occurrence not uncommon; in fact, the plants of this genus are subject to great variations in all their parts. In this case, the petals measure a little over an inch in length, and of a greenish-yellow color; in the typical flowers they are an inch and a half to two inches long and dark purple in color.

The specific name, discolor, is on account of the mottled appearance of the leaves, produced by the blotches of light and dark green, something in the style of the Dog's-tooth Violet, or Yellow Adder's-tongue.



## SUMMER TREATMENT OF HOUSE PLANTS.

MR. JAMES VICK :—I read with much interest, in the last number of the *MAGAZINE*, your instructions addressed to a correspondent on the summer treatment of house plants. The subject is one of such importance to parlor gardeners that I wish it might be still further developed. You say, "as a rule, plants that have passed the winter in the house should be turned out of their pots into the border." But are there not exceptions to this general rule in the care of many plants common in amateur collections and yet less hardy than the *Geraniums*, *Carnations* and *Abutilons* alluded to by Mrs. D. R. E.? I subjoin a list of my own present collection as an example. *Palm*, *Pandanus*, *Ferns*, *Agapanthus*, *Blue Hydrangea*, *Red Dracæna*, *Azalea*, *Fuchsias*, *Begonias*, *Achania malvaviscus*, *Jasminum grandiflorum*. Then there are the "hangers," such as *Money*, *Coliseum Ivy*, *Cape Ivy*, and *Othonna*, to which such treatment seems scarcely applicable.

Almost every lover of flowers, too, has some pet of years standing—some *Azalea*, *Orange*, or *Abutilon*, too large to be easily shifted in and out of pots. I am sure that you would confer a great favor on many of your readers if you would give them a second article on the summer treatment of pot plants, and enter into these, and even further details. I shall open my June number very eagerly, in hopes of finding such a one.—SPES.

Plants that have been several months in the house, and especially soft-wooded ones, where, with scarcely an exception, they have had a deficiency of light and, very probably, an excess of heat, without mentioning other injurious influences they have been subjected to, are more or less spindling and enfeebled. Bringing such plants into the open air is the proper course to restore their tone and vigor and produce a new and stronger growth. As has been frequently remarked in our pages, most plants may be turned out in the open border for the summer.

Some plants that are hard-wooded, like *Camellias*, *Azaleas*, *Orange* and *Lemon trees*, and *Oleanders*, may be allowed to remain in the pots and the pots be plunged up to their rims in a partially shaded place near trees, or what is better, under a screen of lattice-work, such as may be made by covering with lath, allowing spaces of the width of a lath between them. This screen may be in shed-form, made tight and close with boards to the height of three feet on the south and west sides, in order to protect the plants from strong winds; above the height of three feet, for two or three feet more, may be the lath or lattice-work, and the same overhead; at the north and east the place may be open. Underneath this framework, or screen, the soil may be taken out and the space filled in with coal-ashes about a foot in depth; this is the best material to plunge the pots in, as no worms will pass from the ground through or into the soil of the pots.

*Abutilons*, *Heliotropes*, *Achanias*, *Stevias*, *Eupatoriums*, and *Fuchsias* that have acquired a size as large as desirable may be cut back in the spring, when the weather is suitable to take

them out, and be plunged in a shady border, two or three inches over the rims of the pots. The plants will soon begin to grow and will throw out new roots over the edges of the pots, and thus obtain the necessary nourishment. Promptly at the end of summer these plants should be lifted and turned out of their pots, about half the soil removed and then be repotted in the same pots, with some new, fresh soil. Smaller-sized plants of any of those plants just mentioned, and which it may be desirable to grow to a larger size, should be turned out of their pots into the ground. While growing during summer the plants may be trained into any desirable shape, by attention to pinching back the ends of the new growth until sometime past mid-summer. *Chrysanthemums* should not be pinched back after the first of June. *Bouvardias* that have flowered in the house during winter may be cut down within an inch or two of the soil and then planted out. *Geraniums* may be cut back and planted out, and will make plenty of roots and flowering shoots for winter. *Fuchsias*, when they have finished blooming, may be cut down and planted in the open ground, and will there make fine flowering shoots for winter.

One great cause of failure in removing plants from the ground to pots in the fall, is the postponement of the operation to too late a season; it should be done promptly at the close of summer—in this latitude the last of August or first of September. These plants should not be placed in beds that are designed for decoration, for these are usually the most effective for six weeks after the first of September. The winter-flowering plants should be placed by themselves with the distinct end in view of preparing them for the following winter. From two to four weeks before the time for the removal of these plants arrives, pass a sharp spade all around each one, cutting a ball of earth the right size to lift into the pot; a new fibrous growth of roots will push out all around and put the plant in prime condition for potting.

*Begonia Rex* and other *Begonias* of a similar style of foliage, *Double Primulas*, and some other delicate plants may be plunged in their pots in a cold-frame, shaded either by white-washing the glass or by covering it with a screen of lath with openings about an inch wide between the slats; tilt up the sash so as to give plenty of air, and attend to watering. The cold-frame is a capital place for all the plants when they are newly potted in the fall, until they have become fully established.

In August or September the *Camellias*, *Azaleas*, *Orange*, and other plants that have not been repotted in spring, should receive a top-

dressing of fresh soil after removing the old soil down to the roots.

Palms, Dracænas, and Ferns do very well setting in the shade on a veranda or on the north side of the house. In mid-summer, Palms are ornamental on the lawn.

Hanging, or trailing, plants may be taken out of their pots in the spring and divided, and be either repotted and placed in a cold-frame, or else be planted in the ground and left until fall, when they should be potted. Some kinds plunged in the border will strike root from their joints and thus increase rapidly.

### WILD VIOLETS.

MR. VICK :—Being a reader of your valuable MAGAZINE, I take the liberty of sending you the enclosed Violets. The two kinds grow here wild and near each other. Please tell me the difference in name.—KANSAS.

*Viola cucullata*, the Common Blue Violet, is to be found in most sections of the country. A peculiarity of its leaves is that the lobes at the base are rolled inwards so that a leaf has a resemblance to the hood sometimes fastened at



VIOLA CUCULLATA.

the back of a lady's cloak; this is the significance of the specific name, *cucullata*, meaning hooded. The flowers are often of large size and of a deep violet-blue, but in both these respects they are variable; sometimes the flowers are almost white and often of small size, these variations being dependent, no doubt, to a great extent upon the character of the soil where the plants grow. All things considered, the Common Blue Violet is the finest of all our native species; if it had fragrance it would be a highly prized gem.

The Larkspur Violet, *V. Delphinifolia*, is a native of the prairies of the west. The appearance of the flowers of this species at first



VIOLA DELPHINIFOLIA.

sight reminds one of *V. cucullata*, but a closer examination reveals some differences. The foliage is very suggestive of the Larkspurs. It is a very handsome little plant.

### WHITE LILIES—*L. CANDIDUM*.

MR. VICK :—Seeing quite often in your valuable MAGAZINE answers to correspondents, I concluded to write and ask you some things we would like to know. We have in our yard a number of White Lilies—some two hundred or more—which have been there for the past thirty years. We take them up about every third year, planting again in the fall; but, for the last two or three years they have not done well, many of them not blooming, and those that do being slender and small. A year ago last fall we took them up as usual, and last fall were compelled to move them again into another place. Would moving them injure them? They are now planted upon a hill slightly sloping toward the south. We have noticed, several springs, a quantity of some kind of bugs upon them, upon the under side of the leaf; they are brown and flat, and seem more like scales, or some growth upon the leaf, than like bugs. We have sprinkled them with Tobacco-water, but they do not leave until they get ready. Now, I would like to have you tell us about them. What kind of earth should they have? Should they have much water? Does the stock ever run out as some plants do?—Miss A. S. M., *New Albany, Ind.*

The Lilies evidently have not recovered from their late removals. A dressing of rotten manure applied over the ground next fall will help them. Attention to watering them is unnecessary unless a drought should prevail. There is no danger of their running out. We should try the mixture of kerosene, oil and water on the insects, throwing it on with a syringe. A tablespoonful of oil to a gallon of water will be safe on these plants; the difficulty is to mix the oil and water—draw a syringe of the mixture and then forcibly throw it back into the pail and repeat this operation several times before each syringe is thrown on the plants.



**BEGONIA REX.**

I would like to have you give the best treatment for Begonia Rex, or the variety called Beefsteak Geranium, and oblige a lover of flowers who, with all the disadvantages of the M. E. Itinerary, tries to keep a few house plants and make the "parsonage lot" more like home.—MRS. J. S. K., *Robinson, Kansas.*



Begonia Rex is not considered a difficult plant to raise. As a house-plant it is well not to place it in the full sunshine of the window, as it is best in the shade of other plants. On account of its leaves being covered with hairs, it is not as easily sponged and washed as some plants, and, consequently, should have especial care given to it to keep it from the dust. Ordinary potting soil is suitable for this Begonia; it requires only a moderate quantity of water. A moist atmosphere is a necessary condition of thriftiness; a very high and dry temperature is injurious.

**POINSETTIA PULCHERRIMA.**

MR. VICK:—What is the best treatment for a Poinsettia after it is done blooming? Should it be cut down?—MRS. S. A. K.

After the flowering season, the water should be gradually withheld and the soil allowed to become dry. By this means the plant will drop its foliage, and then it may be put in any retired place until wanted to start again. When ready to start, it should be cut down to a foot or two of the ground, and it will then throw up a strong, thrifty stem.

**CROTONS IN SUMMER.**

MR. JAMES VICK:—Please accommodate myself and possibly others, by giving in the next number of the MAGAZINE, the proper summer treatment of the Crotons. Should they be kept under glass?

I am much pleased with the MAGAZINE, and have gathered many excellent ideas from it.—JOHN J. S., *Mexico, Mo.*

If the Croton plants can be conveniently kept under glass, that will be the safest and best course to pursue with them; otherwise they may be plunged in ashes under a lath screen.

**Wistaria Sinensis.**—The Chinese Wistaria is now the most beautiful plant we have—truly gorgeous. Would not your readers be pleased and profited by a colored plate of this flower.—W. M.

Doubtless, and we will try to give one before next planting time.

**SEED PEAS AND PEA-WEEVIL.**

MR. EDITOR:—Please tell me how to destroy the Pea-weevil in Peas that I want to keep for seed, without injuring the Peas. If of sufficient importance, an answer through the MAGAZINE would be acceptable.—D. F., *Salem, Oregon.*

Peas or Beans that have been attacked by weevil and made the receptacle of their eggs may be managed in the following manner, so as to destroy the larva they contain and not injure the germ of the seed. Have ready a close-jointed barrel, or cask, with a tight-fitting cover. As soon as the crop is harvested, place the seed in the cask, and on the top of it set a saucer containing about half an ounce of bi-sulphide of carbon and immediately close the cask tight, and leave it for a few hours. The bi-sulphide is extremely volatile, and in three or four hours will have penetrated every seed and destroyed the larva. Bi-sulphide of carbon is very inflammable, and, consequently, care must be used not to bring it near fire.

**COTTON CLOTH FOR HOT-BEDS.**

In the March number of your MAGAZINE you say you would thank those having experience in its use to give opinions in regard to cotton cloth for hot-bed use. I have seen the cloth sash tested and think it an admirable, cheap substitute for glass. The hot-bed was in every respect arranged as for glass; in place of glass, however, the sash was covered with stout unbleached muslin, painted with linseed oil and yellow\* of egg thoroughly mixed. In a frame covered with this material we planted Cauliflower, Cabbage, Egg-plant, Tomatoes, flower seeds, or anything we wished very early. In warm regions, even in spring, glass sashes will sometimes admit the heat to such a degree as to wilt the plants, and when the sash is raised, if it is windy, the winds injure them; with a cloth sash burning or wilting plants is impossible. The plants are, I think, less heated and more hardy.—MRS. H. E. W., *Bryan, Texas.*

\* White of egg?—ED.

**TENDER PLANTS IN SUMMER.**

MR. VICK:—Wishing for a little information, and not seeing it in your MAGAZINE, I thought I would write for it.

1. In plunging Bouvardias, Stevias, Eupatoriums, etc., is it necessary, or a good plan, to repot them and then do the same again in the fall for the greenhouse in winter?

2. Would you plunge Roses and Chrysanthemums in pots for winter?—G. E. F., *Tewksbury, Mass.*

1. Turn these plants out of their pots into the ground when danger of frosts is past, and take them up and repot them at the end of summer.

2. Yes. Place the pots down to their rims in the ground.

**DOUBLE HEPATICA.**

By the kindness of Mr. M. FINLEY, of Canandaigua, who brought us some of the flowers, we have the pleasure of giving a representation of the double Hepatica from the original wild plant, now cultivated in his garden, and which has been the subject of comment in two previous issues. The plant holds true to its character this spring, giving all double flowers, as it



has heretofore. The three-lobed involucre at the back of the flower appears like a calyx. A close observer will notice the flower has a tendency to a somewhat hexagonal form; the sepals are very regularly imbricated. At the left is shown a single flower as usually seen.

**FLOWER CULTURE AT THE SOUTH.**

The Tulip and Crocus blossomed in February and were all I could wish; some bulbs have increased to three, four, and even to as many as six new bulbs each. The Gladioli are more than a foot high; each one has sent up from three to four stems. The Tigridia has five stems. I am afraid I will lose the Crown Imperial, as it has not made its appearance yet. Is it a late or an early flower? I never saw one; perhaps the warm winter caused it to rot. There has been no sleet or snow this winter, and I have seen ice but a few times. It seems so strange to me that some flowers quite hardy here should cause so much care and trouble north; for instance, Mrs. L. F. G.'s Cape Jasmine, mentioned in the January number. Cape Jasmine here is as hardy as a Cherry Tree. Our mode of planting is thus: Cut the flower with a stem, say four or five inches long, bury it in a damp place and place a stone near the root to prevent the earth drying. I often grow them on the bank of our spring branch. Again, I have filled a bottle with water, throwing a

handful of sand at the bottom, put the flower in the bottle and always keep the water up to where the flower stem starts. I seldom lose one. Magnolias can be obtained in the same way.—H. V. C., *Pinetuckey, Ala.*

**SETTING VERBENA PLANTS EARLY.**

MR. VICK:—I would like to tell you how I succeeded in raising Verbenas last year, and, if you think it would be of any value to the readers of your MAGAZINE, you are at liberty to present it to them. I started the seed early, in the house, and, when large enough to transplant, I had the soil removed to the depth of four or six inches and filled in with stable manure and the soil placed back upon it. I then set my plants, and the result was all one could ask. They began to bloom early, and continued until after hard frosts; they were a complete mass of blossoms. From two beds, from four to six feet square, I gathered, at one cutting, nearly a half bushel of blossoms, and they could hardly be missed from the beds. Treated in this way, the plants can be set quite early, as the heating of the manure will cause warmth enough to carry them through very cool weather. I have found that the Verbena delights in a warm, sunny situation.—MRS. D. P., *South Lyndboro, N. H.*

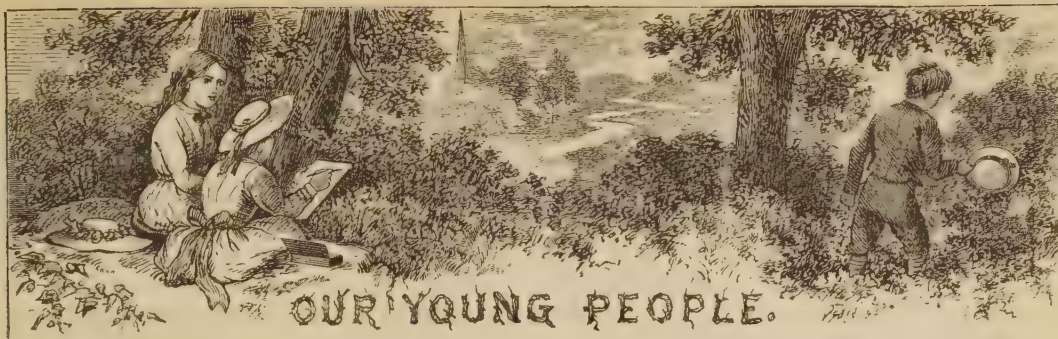
**FLOWERS IN WASHINGTON TERRITORY.**

From Lopez Island, Washington Territory, JOHN L. SHERER writes us, April 17th, "At the present time I have in my garden, in full bloom, Pansies in all their glory, of large size and beautiful colors; Daisies, all double; Polyanthus of various colors; also, Cowslip, Iris, and Violets. All of these I use for borders around my flower beds, and beautiful borders they make when in full bloom, as they are now, and considering the high latitude in which I live, I think it speaks very favorably for our climate. The Flowering Currant and Lilac are also in full bloom."

**LONDON PRIDE, A MISNOMER.**

L. L. RISLEY, of Dimock, Pa., sends us a sprig of a plant, saying: "Here is a piece of what is, through this part of the land, called London Pride, Flower Tree, and English Smart-weed. It is very pretty, grows about four feet high, and is a self-seeder." The plant is a species of Polygonum, and the case presents another example of the misappropriation of the English, or common name of a plant, and makes apparent the value and necessity of one unchangeable name, as agreed upon by botanists.





## OUR YOUNG PEOPLE.

### JOE'S BOUQUET.

Prop yer eyes wide open, Joey,  
For I've brought you sumpin' great.  
Apples? No, a long sight better!  
Don't ye take no interest? Wait!  
Flowers, Joe—I knowed you'd like 'em—  
Ain't them scrumptious? Ain't they high?  
Tears, my boy? What's them fur, Joey?  
There, poor little Joe, don't cry!

I was skippin' past a winder,  
Where a bang-up lady sot,  
All amongst a lot of bushes—  
Each one climbin' from a pot;  
Every bush had flowers on it—  
Pretty? Mebbe not! Oh, no!  
Wish you could have seen 'em growin';  
It was such a stunnin' show.

Well, I thought of you, poor feller,  
Lyin' here so sick and weak;  
Never knowin' any comfort,  
An' I puts on lots o' cheek.  
"Missus," says I, "if you please mum,  
Could I ax you for a Rose?  
For my little brother, missus,  
Never seed one, I suppose."

Then I told her all about you—  
How I bringed you up, poor Joe,  
(Lackin' women folks to do it.)  
Such a imp as you was, you know—  
Till yer got that awful tumble,  
Just as I had broke yur in  
(Hard work, too) to earn yer livin'  
Blackin' boots for honest tin.

How that tumble crippled of you,  
So's you couldn't hyper much—  
Joe, it hurted when I seen you  
Fur the first time with yer crutch.  
"But," I says, "he's laid up now, mum,  
'Pears to weaken every day."  
Joe, she up and went to cuttin';  
That's the how o' this bokay.

Say! It seems to me, ole feller,  
You is quite yourself to-night;  
Kind o' chirik, it's been a fortnit  
Sense yer eyes has been so bright.  
Better? Well I'm glad to hear it!  
Yes, they're mighty pretty, Joe;  
Smellin' of em's made you happy?  
Well, I thought it would, you know.

Never seen the country, did you?  
Flowers growin' everywhere!  
Sometime, when you're better, Joey,  
Mebbe I can take you there.

Flowers in heaven? 'M—I s'pose so;  
Don't know much 'bout it, though;  
Ain't as fly as wot I might be  
On them topics, little Joe.

But I've heerd it hinted, somewheres  
That in heaven's golden gates  
Things is everlastin' cheerful—  
B'lieve that's what the Bible states.  
Likewise, there folks don't get hungry;  
So good people, when they dies,  
Finds themselves well fixed forever—  
Joe, my boy, wot ails yer eyes?

Thought they looked a little sing'ler,  
Oh, no! Don't you have no fear;  
Heaven was made for such as you is!  
Joe wot makes you look so queer?  
Here, wake up! Oh, don't look that way,  
Joe, my boy, hold up your head!  
Here's your flowers, you dropped 'em, Joey!  
Oh, my God, can Joe be dead?

### JOE'S WILD FLOWERS.

Joe is visiting me again. Yesterday he came in with his hat in his hand, filled with wild flowers that he had found in the woods, and wanted me to tell him about them. He knew that I liked nothing so much as examining and finding out all about any flower, however small and apparently insignificant it might look. The first thing that attracted my notice was a Jack-in-the-pulpit—just the very one that preaches to the children every month in the *St. Nicholas*—and while we held up the significant flower I told Joe about a relation of this Jack, who preaches in a yellow coat, and has a real purple-velvet covered pulpit; but nobody loves him, because his reputation is very bad, and he is an offence to the whole neighborhood where he resides; for those unacquainted we will give his name, John Arum Dracunculus—Dra-skunkulus would better express it. Although he is so handsome and his pulpit so grand, no one likes to hear him preach.

The next that I noticed was a pretty, delicate cluster of white, called Tiarella, which word means, a crown, and it was easy enough to imagine each little flower a tiny, white crown; now, Joe and I never can forget the name of this pretty little flower.

Next came the dear, little yellow Violet. "I found lots of those," said Joe, "they grew all over the woods. Have they any bad relations?"

"I never heard anything bad about the family," I replied, "the Violets have a good name, for modesty and humility is a crowning grace of each member of this lovely family."

"Have all flowers relatives," enquired Joe, "I never knew that before; how very funny."

Looking into the bottom of his hat I espied a lot of Grass, which he commenced pulling out, and holding up a part of it by the roots with such an air of reverence and intelligence that I could not help laughing. "Well, Joe!" said I, "what did you bring Grass for?"

"Why, isn't it very curious?" said he.

"O, yes, everything that grows is curious, for the matter of that."

"Oh," he replied, with a half-grieved expression, "I see you think, because there's so much of it, that Grass is not worth looking at."

I felt the rebuke, and made up my mind not to be caught again.—M. H. S.

#### BOTANY FOR LITTLE FOLKS.

Again glancing at those flowers called apetalous, we may learn how some of them, but not all, differ from most of our common, showy flowers in a very remarkable way. And this difference is no less than that the stamens and pistils constitute separate flowers; these are called staminate and pistillate flowers. Usually both kinds are found on one plant, but sometimes the exclusiveness is carried still further, and the staminate and pistillate flowers are produced by separate plants.

When both kinds of flowers grow on the same plant, the plant is said to be monœcious, which means, belonging to one house; the word is derived from the two Greek words, *monos*, one, and *oikos*, a house. In the same manner, when staminate flowers are produced by one plant and pistillate flowers by another, the plant is called dioecious, or belonging to two houses. In order to illustrate the peculiarities described, we introduce to notice some plants more or less familiar; one of these is the common Stinging Nettle, *Urtica urens*. The flowers grow in clusters in the axils of the leaves. At figure 2 a magnified staminate flower is shown; it consists of a four-parted calyx and four stamens situated opposite to the bases of the four divisions. The rudiment only of an ovary is present. The pistillate flower, figure 3, has two principal sepals placed on opposite sides of the ovary, while between them, on each side, are two very minute ones; merely the rudiments of stamens are found. The ovary is surmounted by a brush-like stigma. Thus we

perceive how a flower can be reduced to its essential parts and each part exist separately. The vegetable world offers a multitude of similar illustrations, but we shall only bring forward in this and the following article some few of the prominent examples of this kind of stamens. The plants that will be noticed are either those that are so common as to be easily within reach of most of our readers, and thus available for examination, or those that, by some remarkable peculiarities, force themselves upon our notice and awaken our keenest interest.

The Nettle already noticed is the representative of a family or order of plants called Net-



Fig. 1. Nettle, *Urtica urens*.

tleworts, or Urticaceæ—that is, plants like the *Urtica* or Nettle. In this family are congregated some plants apparently very dissimilar. Who would imagine the Nettle, the Fig, and the Elm tree to be so near alike as to bear a family likeness! yet a careful examination will reveal the similarity.

The succulent Fig is a fleshy receptacle, pear-form in shape, and hollow. On the interior surface, which is equivalent to the upper surface of a receptacle as ordinarily placed, are produced a great number of minute flowers formed somewhat similarly to those of the Nettle—the staminate and pistillate flowers being separate. The arrangement of the flowers within the Fig is shown by a representation of a vertical section of a young Fig at figure 5. Within this hollow space the Fig flowers bloom, and the ovules are fertilized by the pollen-dust of the staminate flowers being shed and scattered upon the pistils ready to receive it. Here the seeds



mature in those little dry and brittle shells that crack and crush between our teeth when eating the Fig; these are what the botanist considers the fruit. As most of our readers know the Fig only from the fruit sold in the shops, or as they have seen it cultivated, we will state that the genus *Ficus* contains many species, of which the



Fig. 2. Staminate Flower of Nettle Magnified.

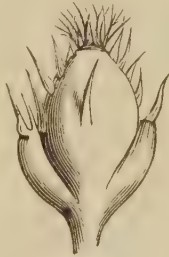


Fig. 3. Pistillate Flower of Nettle Magnified.

one bearing the fruit we eat is only one. One scarcely less important is the India Rubber tree, *Ficus elastica*. The great Banyan tree of India, of which we have all read and heard, is a kind of Fig, and is known botanically as the *Ficus Indica*. This tree has the peculiar habit of sending down roots from its branches that enter the earth and assist in sustaining and increasing the growth of the branches, thus continually extending the tree on all sides.

The Sacred Fig of India, *Ficus religiosa*, is regarded with veneration by the Hindoos.

There are four score and more species of the genus *Ficus*, varying from creeping plants to trees that attain a height of sixty feet.



Fig. 4. *Ficus Carica*.

The Elm is ranked as one of the Nettleworts, but differs from most of the members of the family in having perfect flowers, or those that have both stamens and pistils. Figure 6 shows

the manner in which the flowers are clustered on the branch, and figures 7 and 8 are views of the flower magnified; figure 8 is the flower laid open to show more clearly all the parts. The calyx is five-lobed, and upon it are situated five stamens, each one opposite one of the lobes. There are two pistils, and the ovary is quite free from the calyx. At figure 9 is shown the winged fruit of the Elm; by means of the wing the fruit or seed is carried great distances by the wind, and also floated on the water of streams and thus disseminated.

Having now noticed great diversities among the Nettleworts, we will briefly state the points of resemblance. These are as follows: the leaves are stipulate, but, as in some plants, they fall off soon after they are developed, they can

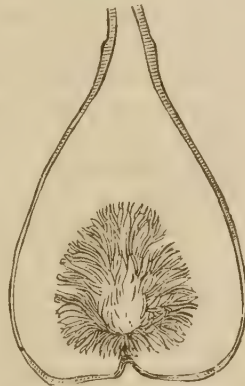


Fig. 5. Vertical Section of very young Fig.



Fig. 6. Elm, *Ulmus campestris*.

in such cases be perceived only at a certain stage of growth; the flowers, whether they are perfect as in the Elm, or staminate and pistillate sorts separate as in the Nettle, are provided with a regular calyx free from the ovary, and the number of stamens is usually the same as the number of the lobes of the calyx and situated opposite to them. There are some other likenesses, but these are the principal points of resemblance. To give a little clearer idea of this family, let us look at some of its members besides those now noticed. The Osage Orange, so well known everywhere as a hedge plant, is one of them; the Paper Mulberry, *Broussonetia*, is another; the Mulberry, *Morus*, is a very important member, and the Hop, *Humulus*, although but a twining vine, is not less so; lastly we notice the Hemp. The common Hemp, *Cannabis sativa*, is a plant that has been cultivated from a very remote antiquity, but its comparative importance in the arts is now much less than formerly. It is a cordage plant, the bark separated from the wood furnishes a long and strong fibre for rope making, weaving into canvas, and for other purposes. Hemp seed is

a staple bird-food. The Indian Hemp, *Cannabis Indica*, is the source of the *hasheesh* of the Arabs, which is smoked by them, and is far more narcotic and dangerous in its effects than opium.

Our purpose to notice some of the forms in which apetalous flowers present themselves has

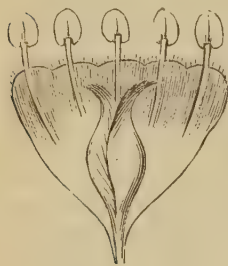


Fig. 8. Elm Flower laid open.



Fig. 7. Elm Flower.



Fig. 9. Elm Fruit.

thus led us, in passing, to observe the family grouping of plants very dissimilar in their general appearance and in their qualities and uses. The student of nature often meets with a like experience, for both in the vegetable and in the animal world the ties of brotherhood not seldom link together the unlike, the graceful and the grotesque; the mythical beauty and the beast, we may almost say, have in nature their representative counterparts.

Resuming the thought with which we first started, we may find the separation of stamens and pistils into distinct flowers exemplified in the *Ricinus*, or Castor-oil plant, that is now so frequently raised in all parts of the country for its admirable ornamental foliage. At figure 11 is seen the pistillate flower divested of its calyx, showing the spiny ovary surmounted by three styles, each of which is two-parted. The staminate flower, with its numerous stamens, is represented at figure 12.

The Castor-oil plant is one of a great family, called Spurgeiworts, or *Euphorbiacæ*. As is well known, the seeds or beans of the Castor-oil plant, if eaten, produce very violent effects upon the system, and, in sufficient quantity, will cause death. These effects are not produced by the oil, but by a poisonous principle the seeds contain and which is not extracted in connection with the oil as it is produced for the trade. This poisonous principle is a characteristic of the order, and is due to a liquid resin that can be driven off with heat. Tapioca is prepared from the milky juice of two kinds of *Manihot*,—the Sweet and the Bitter—tropical *Euphorbiaceous* plants. While the roots of the Sweet *Manihot* are eaten like the Potato, roasted or boiled, and even eaten raw by animals without injury, the roots of the Bitter *Manihot* contain a deadly poison, which the natives use

to poison their arrows. From a translation of an interesting work written, some years since, by SCHLEIDEN, the German botanist, we quote the following life-like description:

"In the dense forest of Guiana, the Indian chief has stretched his sloping mat between two high stems of the *Magnolia*, he rests indolently smoking beneath the shade of the broad-leaved *Banana*, gazing at the doings of his family around. His wife pounds the gathered *Manioc* roots with a wooden club, in the hollowed trunk of a tree, and wraps the thick pulp in a compact net made from the tough leaves of the great *Lily-plants*. The long bundle is hung on a stick, which rests upon two forks, and a heavy stone is fastened to the bottom, the weight of which causes the juice to be pressed out. This runs into a shell of the *Calabash Gourd* placed beneath. Close by squats a little boy, and dips his father's arrows in the deadly milk, while the wife lights a fire to dry the pressed roots, and by heat to drive off more completely the volatile poisonous matter. Next it is powdered between two stones, and the *Cassava-meal* is ready. Meanwhile, the boy has completed his evil task; the sap, after standing some considerable time, has deposited a delicate, white



Fig. 10. Castor-oil Bean, *Ricinus*.

starch, from which the poisonous fluid is poured off. The meal is then washed with water, and is the fine white Tapioca, resembling in every respect Arrow-root. In a similar, more or less skillful manner, are the *Mandioca* and Tapioca everywhere prepared."

A tree growing in tropical South America,



the *Siphonia elastica*, a member of the *Euphorbia* family, yields a milky juice from which India rubber is prepared the same as from *Ficus elastica*. Nor is this the only source of this exceedingly valuable material. Another member of this same family, *Croton Tigli-*

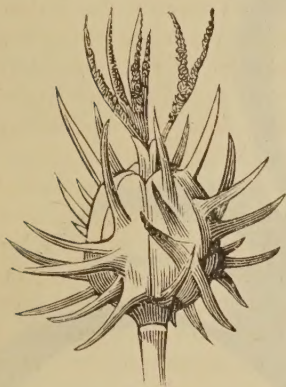


Fig. 11.

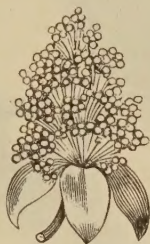


Fig. 12.

um, a small tree of the Molucca Islands, produces seeds which, like the Castor-oil Beans, yield oil. This substance, called Croton Oil, is used by physicians in particular cases. Taken internally a drop or two of it will cause violent purging, and if rubbed on the skin will quickly raise blisters.

An examination of all the different species of the *Euphorbia* family would reveal, in almost every case, the presence of a poisonous principle in connection with the milky juice which these plants yield.

#### THE TREE PÆONY.

MR. EDITOR:—My old teacher used to say that everything valuable grows slowly, and perhaps this was designed as an apology for our little speed in the the paths of literature and science. As an illustration, he once called our attention to a plot that we had sown with Grass



seed in front of the school-house. The May showers had given the grass a start, so that we could just discover a tint of green, but the Dock, and especially the Burdocks, were a foot in height, while we were not aware that there was a root in the ground, and we certainly did not plant any.

But I designed to speak of a Tree Pæony which I have. I planted it five years ago this spring, I think, and it grew so slow and flowered so little that I became discouraged, a little impatient, and thought I had paid a dollar for a very poor plant; but the third year I became a little more encouraged, and this spring I have a round, elegant plant, that I would not sell for a good many dollars. I have tried to make a drawing of it, and perhaps your engravers and artists can make a picture of it for the MAGAZINE. It is covered with large pink flowers, so many that I could not show them all.

We have in our orchard a good many Northern Spy Apple trees, and while other trees were bearing these bore nothing of any account, but kept on growing. I asked father a good many times to graft them with Baldwins, but he said, "Have patience, good things come slow." Now our Northern Spy trees are the pride of our orchard. So, let us all have patience and wait for the good things to come.—ARTHUR.

#### FLOWERS FOR SICK CHILDREN.

Few of us can appreciate the pleasure it must be to the children confined in a hospital in a great city like London to have a gift of flowers. What a help and encouragement it must prove to them, and how better than medicine to the sick and convalescent!

On last May day the Rev. Canon FARRAR preached a "flower" sermon at the parish church at Slough, where about one thousand children were present. Each child brought a bouquet, and at the close of the service these were placed on the steps of the chancel, where they formed a large bank and completely scented the chancel of the church. Afterwards the flowers were all carefully packed up and taken charge of by the Canon and sent by rail to London, where they were presented to the children who are inmates of Westminster Hospital. The text the Canon selected was, "Consider the Lilies of the field, how they grow."

#### POISONOUS MUSHROOMS.

California sent us the news, last month, of the death, by eating Mushrooms, of a person who was skilful in judging of them. He had frequently cautioned his neighbors about eating them, and a writer to the *Pacific Rural Press* reports that he had said to him, "You know, friend J., it is dangerous to eat them unless you *know* you have the right kind, for some of them are very poisonous." He had been a careful observer of them for years, but at last died from eating poisonous ones.





### LARGE LILY.

MR. VICK:—I must take some of your valuable time to tell you of my Japan Longiflorum Lily. I obtained the original root of you. This one is an off-shoot, transplanted to another bed, and its size surpasses any I have ever seen. Height of stalk to bend of top Lily is four feet seven and one-fourth inches; around the stalk measures two and one-fourth inches, and it has nine Lilies open on the one stalk. Measuring one of the Lily blossoms across the front, from tip of leaf to tip, is six inches and three-quarters.

I want to know if, in your climate, this Lily is so large or the stalk so high, and is it not unusual for so many on one stalk? Have yours bloomed with so many?—MISS A. M. SLOVER, Newbern, N. C.

We have never grown or seen such a Longiflorum Lily as described by our correspondent, nor so many flowers on a plant. Some time since we made an engraving of one of the largest flowers in a bed of several thousand plants, and take this occasion to present it to our readers. It is much smaller than the North Carolina flower, and the plant bore only two flowers. The Longiflorum is a beautiful, clear white, trumpet-shaped flower, and one of our special favorites. The Longiflorum Lily is perfectly hardy and healthy. The plant with us seldom exceeds

two feet in height, and as its merits become known will be very popular. It bears forcing well and, therefore, can be grown in the house. Indeed, florists like to keep a few in flower to cut for weddings, etc. It is one of the good flowers that we cannot commend too highly.

There are two white trumpet-formed Lilies, larger and somewhat scarce, Eximium and Takesima. Eximium has flowers from one to two inches larger than Longiflorum, and the plant is a little taller. Takesima has flowers about the same size as Eximium, but the plant is quite distinct, the flower stalk being purple.

We don't know of any garden plants that will give our readers more pleasure than a few of our best Lilies. About half-a-dozen is all we would recommend to our young readers, and among the first of these would be the beautiful Easter Lily, Candidum; then Lancifolium, red and white, and Pardalinum. The Auratum is a mammoth beauty, but is a little uncertain, and is apt to disappoint us after a year or two. The early autumn is the best time to plant Lilies, and the earlier the better for Candidum.







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